DOCUMENT RESUME

ED 185 874 HE 012 088

AUTHOR Rubin, Allen, Ed.; Rosenblatt, Aaron, Ed.
TITLE Sourcebook on Research Utilization.
INSTITUTION Council on Social Work Education, New York, N.Y.
PUB DATE 79
NOTE 232p.; Papers presented for discussion at the Conference on Research Utilization in Social Work Education (New Orleans, LA, October 5-7, 1977).
AVAILABLE FROM Council on Social Work Education, 345 E. 46th Street, New York, NY 10017

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS *Curriculum Design; Curriculum Evaluation; Educational Quality; Field Experience Programs; Graduate Study; Higher Education; Productivity; Professional Education; Program Descriptions; Research Needs; *Research Skills; *Research Utilization; *Social Work

ABSTRACT

Major papers presented at the Conference on Research Utilization in Social Work Education are compiled in this sourcebook. The conference focused on six topics that reviewed the state of the art of research utilization and suggested directions for the future. The papers included are: Understanding Research Utilization in Social Work (Stuart A. Kirk); Understanding the Utilization of Research in Social Work and Other Applied Professions (Richard L. Simpson); Research Priorities in Social Work Education: A Communication to Colleagues (Jerry S. Turem); Identifying Research Priorities in Social Work Education (David M. Austin); Gaps and Linkages in Research Utilization: Enhancing Utilization Through a Research and Development Approach (Jack Rothman); Improving the Quality and Increasing the Productivity of Social Work Research (Dorothy Miller); Incorporating Research into Macro Social Work Practice and Education (Irwin Epstein and Tony Tripodi); Incorporating Research into Education for Clinical Practice in Social Work: Toward A Clinical Science (Scott Briar); On Research and Practice Teaching in Social Work (John R. Schuerman); Specifying Curriculum Goals for Research in Social Work Education (Anne Minahan); Strategies and Tactics for Increasing Research Production and Utilization in Social Work Education (John L. Bushnell and Gregory M. St. I. O'Brian); and Social Science Knowledge and Social Work Practice (Martin Rein and Sandra Tanenbaum). A list of conference participants and a copy of the conference agenda are appended. (SF)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED185874

SOURCEBOOK ON RESEARCH UTILIZATION

Edited by
Allen Rubin
&
Aaron Rosenblatt

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Council on Social Work Educ.

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

COUNCIL ON
SOCIAL WORK
EDUCATION

012082

Sourcebook on Research Utilization

Edited by
Allen Rubin
&
Aaron Rosenblatt

A compilation of papers presented for discussion at the
Conference on Research Utilization in Social Work Education.

New Orleans, Louisiana

October 5-7, 1977

Council on Social Work Education
New York

Copyright © 1979 by the Council on Social Work Education, Inc.

All Rights Reserved.

Library of Congress Catalog Card No. 78-73337.

Printed in the United States of America.

The opinions expressed in this publication are solely those of the contributors and do not necessarily reflect the policy or position of the Council on Social Work Education. No official endorsement of the views presented should be inferred unless it is so indicated.

Council on Social Work Education
345 E. 46th St., N.Y., N.Y. 10017

The papers printed in this volume are working papers that served as the basis for discussion at the sessions of the Conference on Research Utilization in Social Work Education held in New Orleans October 5-7, 1977. As such, the authors may see fit to revise these papers and submit them elsewhere for publication.

PREFACE

Programs of social work education recognize the importance of preparing practitioners who will produce and utilize new knowledge that can help the profession better attain its social welfare goals. To this end, research is taught at each level of the social work curriculum. Despite this educational attention to research, the actual utilization of research is disappointing. Various studies report that social workers attach little value to research courses and seldom consult research studies to guide their practice.* Why is this so? How shall social work researchers and educators modify their approaches in order to improve research utilization? The papers in this report and the conference at which they were presented tackled these questions.

The Council on Social Work Education sponsored the Conference on Research Utilization in Social Work Education at the Hilton Hotel in New Orleans, October 5-7, 1977. This conference was part of the Council's Project on Research Utilization in Social Work Education, supported by a grant from the Social Work Training Branch of the National Institute of Mental Health (award #1 T31 Mh14311-01). The purposes of the conference were to spotlight research utilization, stimulate social work educators to rethink the teaching of research, and begin identifying ways to improve the utilization of research. This report includes the major papers presented at the conference. A roster of conference participants is presented in Appendix I. A later volume will present project recommendations that gained impetus from this conference.

Aaron Rosenblatt, former director of the Research Utilization Project, conceived of the conference and organized it. The Council deeply appreciates his work. The Council also thanks the members of the Advisory Committee to the Project (noted in the roster of participants). This committee displayed an intense task orientation and great judgement in planning the conference and its follow-up. Special thanks go to Scott Briar, University of Washington, who chaired the Advisory Committee and the conference.

The Council was gratified to hear from many participants that the conference was highly successful. This was due in large part to the fine work of those mentioned above. Others who contributed significantly to the success of the conference included authors of the presented papers and reactors to those papers. The authors are identified in the text of this volume. The Council expresses its gratitude for their excellent work.

Not included in this volume are the stimulating presentations made by the reactors, who were: Morton Arkava, University of Montana; Gilbert Baca, New Mexico Highlands University; Laura Epstein, University of Chicago; Andrew Fox, Social Service Delivery Systems, Memphis; Carel Germain, Columbia University; Shanti Khinduka, Washington University; Patricia Martin, Florida State University; Rekha Agarwala Rogers, Applied Communication Research, Stanford, Calif.; Deborah Shapiro, Child Welfare League of America; Nancy Staver, Judge Baker Guidance Center-Boston; Joan Wallace, U.S. Department of Agriculture; and Harold Weissman, Hunter College. We are also indebted to William Bell, Tulane University, and to Diana Waldfogel, Simmons College, for serving as conference recorders.

Gratitude is extended to the other conference participants for their thoughtful comments in discussing the presentations and developing preliminary recommendations for conference follow-up. In this connection, special thanks are due the leaders and recorders of the small discussion groups that followed the conference presentations.

Finally, the Council is very grateful to the Social Work Education Branch of the National Institute of Mental Health, Department of Health, Education, and Welfare, for the grant that made this conference possible. As sponsors of the conference, the Council on Social Work Education believes the material in this volume will help advance knowledge about research and research utilization in social work education. We hope that the conference upon which this document is based will prove to have been a benchmark for the further development of these areas in the social work curriculum.

Allen Rubin
Project Director

---

* See, for example: Aaron Rosenblatt, "The Practitioner's Use and Evaluation of Research," Social Work, Vol. 13 (1968), pp. 53-59; Stuart A. Kirk, Michael J. Osmalov, and Joel Fischer, "Correlates of Social Workers' Involvement in Research," unpublished paper (1975); and Betsy-Lea Casselman, "On the Practitioner's Orientation Toward Research," Smith College Studies in Social Work, Vol. 42 (1972), pp. 211-33.

INTRODUCTION

Research production and utilization in social work long have been recognized as less than adequate for a profession that is avowedly committed to basing its practices on scientific knowledge. In recent years there have been signs of a growing resolve within the social work profession to strengthen the relationship between practice and research. To encourage and facilitate this trend, the Council on Social Work Education in 1976 established a project on Research Utilization in Social Work Education with the support of a three-year grant from the National Institute of Mental Health. It is especially appropriate that this effort was undertaken by CSWE, because of the central role of institutions of higher education in research for the professions.

The broad goals of the Research Utilization Project, expressed in a number of more specific objectives, are to: (1) analyze the dynamics of research utilization in social work; (2) identify the obstacles to research utilization, especially those that exist in social work education; and (3) recommend courses of action for achieving more effective research utilization in the profession. The project initiated a variety of activities, one of which was the Conference on Research Utilization that generated this volume.

The conference was held in New Orleans in October 1977. It brought together practitioners and researchers from academic and practice settings, and representatives from the Council on Social Work Education, the National Association of Social Workers, and the federal government. The general purpose of the conference was to review the state of the art on research utilization in social work education and to suggest directions for the future work of the project. Invited papers were prepared on six topics:

1. Understanding the utilization of research in social work and other applied professions.

2. Identifying research priorities in social work education.

3. Improving the quality and increasing the productivity of research.

4. Incorporating research into social work education and practice.

5. Specifying curriculum goals for research in social work education.

6. Strategies and tactics for increasing the production and utilization of research in social work education.

The principal papers on these topics are reproduced in this volume.

Since the invited papers were distributed to participants in advance, it was possible to devote most of the time in the conference sessions to discussion of the implications of the papers for research utilization in social work education and for the future work of the project. The results of these lively discussions far exceeded the most optimistic expectations of the project staff and the Advisory Committee. In addition to a variety of specific suggestions that are being explored and developed in the project, a remarkable degree of consensus emerged on four principal themes:

1. The need to formulate empirically based practice models for social work in which research occupies an integral, essential role.

2. Social work research should be directed to finding solutions for the problems encountered by practitioners, with special emphasis on developmental research.

3. Social work students should be prepared for active participation in the research process, not only to be passive consumers of research.

4. The development of a new breed of practitioner-scientists should be cultivated and encouraged.

The success of the conference is a tribute to all those who had a part in it: to Aaron Rosenblatt, then director of the Research Utilization Project, whose vision inspired the project and the conference; to Allen Rubin, current project director, the project Advisory Committee, and the CSWE staff, whose effective efforts set the stage for a stimulating forum; to the conference participants, whose contributions achieved a level of creativity that generated optimism for the future of research utilization in the profession; to the staff of the Social Work Training Branch of NIMH, whose support made the conference possible; and to professional social workers everywhere, whose increasing recognition of the need for research made it worthwhile to consider how that research could be utilized more effectively.

The results of the conference did not end in New Orleans and will not end with this publication. Other direct effects of the conference will be evident in the continuing work of the project.

Scott Briar
Chairperson, Advisory Committee
CSWE Project on Research Utilization
in Social Work Education

CONTRIBUTORS

David M. Austin
University of Texas at Austin
School of Social Work
Austin, Texas

Scott Briar
University of Washington
School of Social Work
Seattle, Washington

Jon Bushnell
University of Wisconsin-Milwaukee
School of Social Welfare
Milwaukee, Wisconsin

Irwin Epstein
University of Michigan
School of Social Work
Ann Arbor, Michigan

Stuart Kirk
University of Wisconsin-Milwaukee
School of Social Welfare
Milwaukee, Wisconsin

Dorothy Miller
Institute for Scientific Analysis
San Francisco, California

Anne L. Minahan
University of Wisconsin-Madison
School of Social Work
Madison, Wisconsin

Gregory M. St. L. O'Brien
University of Wisconsin-Milwaukee
School of Social Welfare
Milwaukee, Wisconsin

Martin Rein
Bryn Mawr College
The Graduate School of Social Work
and Social Research
Bryn Mawr, Pennsylvania

Jack Rothman
University of Michigan
School of Social Work
Ann Arbor, Michigan

John R. Schuerman
University of Chicago
School of Social Service
Administration
Chicago, Illinois

Richard Simpson
University of North Carolina
Department of Sociology
Chapel Hill, North Carolina

Sandra Tanenbaum
Bryn Mawr College
The Graduate School of Social Work
and Social Research
Bryn Mawr, Pennsylvania

Tony Tripodi
University of Michigan
School of Social Work
Ann Arbor, Michigan

Jerry Turem
The Urban Institute
Washington, D.C.

CONTENTS

Preface iii

Introduction v

Contributors vii

PART I - UNDERSTANDING RESEARCH UTILIZATION 1

Understanding Research Utilization in Social Work
by Stuart A. Kirk 3

Understanding the Utilization of Research in Social Work and Other Applied Professions
by Richard L. Simpson 16

PART II - IDENTIFYING RESEARCH PRIORITIES 29

Research Priorities in Social Work Education: A Communication to Colleagues
by Jerry S. Turem 31

Identifying Research Priorities in Social Work Education
by David M. Austin 53

PART III - ENHANCING QUALITY AND PRODUCTIVITY IN SOCIAL WORK RESEARCH 79

Gaps and Linkages in Research Utilization: Enhancing Utilization Through a Research and Development Approach
by Jack Rothman 81

Improving the Quality and Increasing the Productivity of Social Work Research
by Dorothy Miller 110

PART IV - INCORPORATING RESEARCH INTO PRACTICE IN SOCIAL WORK EDUCATION 119

Incorporating Research into Macro Social Work Practice and Education
by Irwin Epstein and Tony Tripodi 121

Incorporating Research into Education for Clinical Practice in Social Work: Toward a Clinical Science in Social Work
by Scott Briar 132

PART V - SPECIFYING GOALS FOR RESEARCH CURRICULUM 141

On Research and Practice Teaching in Social Work
by John R. Schuerman 143

Specifying Curriculum Goals for Research in Social Work Education
by Anne Minahan 150

PART VI - INCREASING THE PRODUCTION AND UTILIZATION OF RESEARCH 167

Strategies and Tactics for Increasing Research Production and Utilization in Social Work Education
by Jon L. Bushnell and Gregory M. St. L. O'Brien 169

Social Science Knowledge and Social Work Practice
by Martin Rein and Sandra Tanenbaum 189

APPENDIXES 221

Appendix I - Roster of Conference Participants 223

Appendix II - Program 225

PART I

UNDERSTANDING RESEARCH UTILIZATION

UNDERSTANDING RESEARCH UTILIZATION IN SOCIAL WORK

by Stuart A. Kirk

The purpose of this paper is to place the issue of research utilization in a broad perspective by addressing (1) the role of knowledge in the professions, (2) the available models of knowledge utilization, and (3) the problems of research use among professionals, and in particular, social workers.

Fifteen years ago a small group of prominent social work scholars met under the sponsorship of the National Association of Social Workers for three days to discuss issues related to the building of social work knowledge. Working papers were prepared in advance and distributed to the participants. The conference report[1] made available two years later, indicates that substantial attention was given to how social work knowledge--both indigenous and borrowed from the social sciences--could be identified, selected, assembled and organized for the profession. The recommendations of the conference addressed the continuing need to develop, identify and organize social work knowledge.

In 1977, the Council on Social Work Education held a conference with a similar format and closely related agenda. Where the 1962 conference focused on the identification and organization of knowledge, the 1977 conference examined the dissemination and utilization of knowledge. It is perhaps a sign of professional development that social work is less preocuppied with identifying its knowledge base, and is more concerned with the ways in which existing knowledge can be applied widely and effectively in social work education and practice.

The purpose of this paper is to place the issue of research utilization in a broad perspective by addressing the role of knowledge in the professions, some of the available models of research utilization, and finally, the problems of research use among professionals, and in particular, social workers.

Knowledge and Professional Education

There is a variety of lists of professional characteristics--Greenwood's[2] list originally published in Social Work being one of the most frequently cited--and even a variety of lists of which occupations are professions, semi-professions, or professions-in-

the-making. Goode[3] suggests that all characteristics of professions flow from two central qualities. The first is the possession of a body of abstract knowledge, and the second, the ideal of service. It is the possession of a body of abstract knowledge that forms the basis for professional authority over the creation, organization and transmission of knowledge, over the selection and training of candidates for the profession, over the terms under which the profession is practiced, and over what services the client should receive. Although many occupations have substantial technical skill, professionals derive their skill directly from a body of abstract knowledge.

Convincing the community that professional practice is based on an abstract body of knowledge can be decisive in having the community confer professional status. Elementary school teachers, for example, apparently have been unable to convince the public that they meet this crucial criterion, and consequently school boards, legislators and the public at large frequently intervene in their professional domain.[4]

The ideal of service consists of a commitment on the part of professionals (often embodied in a code of ethics) not to abuse their knowledge and skill, and to use it only in behalf of clients. The community's belief in the service ideal provides the justification for the profession to regulate itself.

Professional education distinguishes itself from other occupational training by being based primarily on the mastery of a body of abstract knowledge and theory, rather than simply on the mastery of practice skills. Since professional practice purports to be based on theory, training for all of the major and minor professions is increasingly taking place in university-related professional schools. This was not always the case. Originally, professionals received their learning "in the field." Apprenticeship was the normal mode by which doctors obtained instruction in the United States in the 17th and 18th centruy.[5] Similarly, lawyers learned their trade by working in a lawyer's office, often serving as clerk-copyists.[6] With the expansion of knowledge and the development of systematic bodies of theory professions justified shifting the site of their training from the field to university-based professional schools. Simultaneously they increased the separation between knowledge and practice. The division of these two types of learning has continued as a controversial issue in the education of all professions.[7]

Pilots, electricians, and diesel mechanics serve apprenticeships and are trained in trade schools. While the skills they acquire are often considerable, their training differs from that of professionals. They do not master a complex, abstract body of knowledge nor do they have immediate contact with the source of their knowledge or with those who develop it.[8] Physicists do not train electricians; neither are electricians equipped to participate in the creation of new knowledge. Thus, although many occupations require substantial knowledge and skill, only professions claim that their new members can appreciate, understand, and participate in the broad

knowledge-building process underlying professional practice. The image of the professional presented to the public by the major professions is that of scholar-servant.

Since professions claim a unique status on the basis of being the overseers of an abstract body of knowledge, they must ensure that the knowledge taught in educational institutions is sufficiently esoteric and sufficiently complex, so that their claims will be respected. In the past, however, practice remained relatively simple. Medicine consisted of prayer and placebo; law involved the management of small quarrels; the ministry identified and purged minor sins; and social work offered moral uplift to the wayward. The entry of science and scholarship into professional education and practice has helped validate their claims to a knowledge base.

This is not to say that everything that is learned in professional schools is valid or readily applicable to the world of practice. Professional education involves more than the imparting of theory and knowledge. As Hughes states,

> While the student is acquiring his professional knowledge, he is also being inducted into a fraternity. Much that passes for theory, and much that is called practice as well, is the ideology of the profession including its conception of the nature of the phenomena it deals with--the nature of disease as seen by physicians, of law as seen by lawyers, of social problems as seen by social workers. No profession does its teaching without implanting its philosophy concerning the aspects of nature, society, culture, and knowledge involved in its work. Part of that philosophy is a set of convictions about what knowledge and what skills are most important. No one can know more than a small part of the theory and practice of any of these professions.[9]

Professional socialization, including the learning of theory and ideology, provides professionals with more information than they need in order to practice. Goode[10] suggests that to some extent all professionals are overtrained in that they do not use most of their abstract knowledge. When dealing with most problems they do not apply abstract principles, but instead apply specific recipes to cases. Awareness of this resevoir of unused knowledge, and the enormous length of time required for its mastery has provided one rationale for expanding the use of sub or paraprofessionals, people trained not in the broad body of knowledge, but rather in a narrow area of specific applications to practice.

For the most part, analysts present an oversimplified image of the role of knowledge in professional practice. They assume that what is valid knowledge for a profession is known, that it can be taught, that students learn and remember what is taught, that they use this knowledge in the world of practice, and that practice changes with the evolving knowledge base of the profession. Such a description is probably accurate for some professions, under certain circumstances, but it may be wholly misleading in other cases.

Knowledge Utilization

The use of knowledge is a complex phenomenon. Anyone who naively wanders into the knowledge utilization literature for the first time will be overwhelmed with information. Those who have been trained to develop knowledge through research and to communicate that information to students have been relatively oblivious to the processes through which knowledge is developed, disseminated, and used.

The research on knowledge utilization is itself extensive. The number of citations in the knowledge utilization literature has grown from 400 to an estimated 20,000 in the last two decades.[11] The two most comprehensive summaries of that literature, although much needed and extremely helpful, are themselves forbiding.[12]

They offer nearly 1,000 pages of condensed material presenting concepts, factors, phases, stages, structures, and models pertaining to the utilization of knowledge. This literature stresses organizational factors related to knowledge utilization and change, not specifically the utilization of research by professionals. Since professionals are increasingly employed by organizations and subject to agency environments, this literature is relevant.

Many schemes are used to organize the literature on the processes of knowledge development, dissemination and utilization.[13] For example, many authors group together related variables that affect these processes.[14] Other authors synthesize this literature by organizing it around stages in the knowledge utilization process.[15] Still others attempt to build models to explicate the knowledge development, dissemination and utilization process which involves the interaction of multiple variables at different stages. Three complementary and widely cited models have been identified by Havelock.[16]

The Research, Development, and Diffusion Model suggests a linear, rational sequence which includes basic research, applied research, the development and testing of prototypes, mass production and packaging, and finally, dissemination of knowledge. This model primarily pertains to the macrosystemic and policy levels of analysis. It assumes a planned and coordinated research and development process. The model also assumes a division of labor and a separation of roles and functions. For example, the basic researchers are not the ones who mass produce, package or use the knowledge. In the RD&D scheme consumers are a clearly defined and somewhat passive audience who will accept an innovation if it is delivered in the right way at the right time. Finally, the model stresses the scientific evaluation of every stage of the RD&D process. The high initial development costs prior to dissemination are expected to pay dividends in the long run in terms of efficiency, quality, and capacity to reach a large audience.

The Social Interaction Model, unlike the RD&D model, assumes

the existence of a diffusable innovation and is relatively indifferent to the scientific or technical features that have gone into its development. It is much more concerned with the diffusion of the innovation and how this is influenced by social structure and relationships. The S-I model focuses on the microsystem level and on the latter phases of the research, development and diffusion process. This model is more sensitive than the RD&D perspective to the complex and intricate set of human relationships which impinge on the diffusion process. It stresses the role of key influentials in the user's social network. One's position in that network, face-to-face interpersonal contacts, and the number of overlapping reference group identifications are all important in the knowledge diffusion process. The model has been supported by numerous empirical studies in medicine, agriculture and education.[17]

The third model is the Problem-Solver Model. Here the consumer of knowledge is the center of analysis. Basically this is a psychological and "user-oriented" model of dissemination and utilization. It assumes that self-initiated change offers the firmest motivational base and the best chance to achieve lasting effects. Change introduced by an outside change agent may only be temporary. The model suggests that the problem-solving process begins with the consumer sensing and identifying a need. This need is then diagnosed as a problem to be solved. A search is initiated to locate resources relevant to the problem and potentially feasible solutions are transformed or adapted to the specific problem. The solution is then used on a trial basis and evaluated in terms of need reduction. If the solution does not work, the cycle begins again.

Each of these three models has strengths and limitations. The RD&D model emphasizes the role of research and development and the rational planning of diffusion efforts, but it pays little attention to the role of the consumer of knowledge. The S-I perspective carefully documents the importance of social networks in understanding the flow of knowledge and utilization through a user system; however, it fails to articulate the linkages between the producers and users of knowledge. The P-S model directs attention to the psychological conditions under which new knowledge may be sought out and used by consumers, but it overemphasizes the extent to which consumers are capable of generating their own solutions to problems.[18]

Research Use Among Professionals

Since much of the knowledge utilization literature derives from studies of industry and agriculture, the extent to which it can be generalized to professional practitioners is unknown. Ideally, we should be able to to draw on empirical, comparative studies of knowledge utilization patterns among different professional groups, but such studies are not available. What is available are bits and pieces of evidence from several professions and professional organizations.

Professions differ in respect to the extensiveness of their knowledge base and the character of the research that generates that knowledge. Medicine, law and the ministry, for example, use different research methods to generate knowledge. Research in medicine conforms most closely to the way that social workers would like to view their own knowledge: a carefully developed body of theory and facts, validated by objective, controlled experimentation, being applied by a highly sophisticated technology. Legal knowledge consists of principles derived from legal precedents. Legal research examines relevant precedents and the use of that information for adversary, not objective reasons. Social and behavioral research is used rarely. Ministers' body of knowledge is revelation through received tradition. Scholarship consists of careful documentation of faithfulness to the original revelation. The experimental research methods common to the social sciences are not relevant to their knowledge. Thus, when we speak of professionals' utilization of knowledge generated through research, we need to be cognizant that knowledge and the methods of generating it are quite different.

All professions and those occupations seeking professional status make the assumption that research will somehow have an impact on professional practice. For example, in several recent articles on nursing research,[19] the authors indicate by exhortation, rather than by evidence, that "research findings are having great impact on nursing care. . ."[20] This declaration and its public relations overtone can be found within most professions. Clearly, much more research is conducted in nursing, social work, medicine, education, etc., than ever before. The question is, to what extent if any, is the research having an effect on practice?

A recent study in nursing illustrates the problem. Ketefian wanted to learn the extent to which a specific research finding was utilized by practicing nurses. The finding, documented through a series of studies and widely disseminated over a five-year period, had a direct application to nursing practice. Nevertheless, among nurses surveyed, she found that "the practitioner either was totally unaware of the research literature relative to her practice, or if she was aware of it, was unable to relate to it or utilize it."[21] The nurses even continued to utilize methods they thought were not sound. Type and amount of education, recent graduation from school, and frequency with which the procedure was performed made no difference in the nurses' practices in this regard.

The problem illustrated by this study of nursing practice is probably widespread in other professions as well. The accumulating evidence shows that research findings designed to be relevant for professional practice are seldom utilized. At least this is the common lament of those in the evaluative research business.[22] Patton et al., in a preface to their own study of the use of federal health evaluative research, located the following common observation:

> Ernest House (1972:412) put it this way: "Producing data is one thing! Getting it used is quite another." Williams and

> Evans (1969:453) write that "in the final analysis, the test of the effectiveness of outcome data is its impact on implemented policy. By this standard, there is a dearth of successful evaluation studies." Wholey (1971:46) concluded that "the recent literature is unanimous in announcing the general failure of evaluation to affect decision-making in a significant way." He goes on to note that his own study "found the same absence of successful evaluations noted by other authors (1971:48)." David Cohen (1975:19) finds that "there is little evidence to indicate that government planning offices have succeeded in linking social research and decision-making." Alkin (1974) found that Title VII evaluations were useful to project directors but were not useful at the Federal level because the results were not timely in terms of funding decision. Weidman et al. (1973:15) concluded that on those rare occasions when evaluation studies have been used,". . . the little use that has occurred (has been) fortuitous rather than planned."[23]

Social workers have a similar problem. They profess a high regard for research,[24] but they don't like to study research;[25] they seldom use research studies in their professional work or to improve their skills;[26] their professional reading is not research oriented;[27] they are not likely to conduct research after leaving school;[28] and they have considerable difficulty accepting research with negative findings.[29]

Given this practitioner orientation to research, publication of a research report in a scholarly or professional journal does not constitute effective dissemination. For example, less than half the social workers read journals that contain substantial research content.[30] Estimates in psychology are that half the articles in each "core" scientific journal are **read** by fewer than 200 persons.[31] Similarly, Roberts and Larsen[32] report that few mental health practitioners make any large-scale or systematic effort to read research results reported in formal communication channels. In nursing, medicine and law, the major research journals are not widely distributed beyond the faculties of professional schools.

Where then do professionals get new knowledge after they graduate? In a widely cited study of the introduction and use of a new drug by physicians,[33] those who began prescribing the drug sooner were more likely to have received their information from a social intermediary (a detail man or a colleague) rather than a professional journal. While early users were more likely to subscribe to a large number of medical journals than **late** users, only 7 percent said that they first learned of the new drug from a professional journal, while 57 percent first learned of it from the detail man. Similar studies have not been conducted among social workers, perhaps due in part to the difficulty of identifying what constitutes an innovation in the profession. There are indications, however, that the diffusion process might be similar. In surveys asking social workers to whom they turn when they need help with a difficult practice problem, most say they turn to super-

visors and colleagues rather than research findings.[34]

Little information is available on where and how (perhaps even if) professionals acquire new knowledge. Yet explanations abound why research findings are not used.[35] It is frequently stated that much social science is not applicable to social intervention. The social sciences are said to be concerned primarily with esoteric theoretical matters and not with common human problems. And even when social scientists do study social problems, they frequently work with nonmanipulatable independent variables (e.g. sex, race, marital status) or develop nomothetic explanations that provide little assistance to those involved in solving special problems. For example, Davis reports that he was invited to prepare a paper for a conference on the implications of sociological findings for social policy. He scanned recent issues of the two major sociological journals, and selected the first article on education that met his assigned criteria and analyzed it. He concluded:

> . . . the article has virtually nothing to say with policy implications, direct or indirect. By which I mean this: If I were a person with enormous authority or influence in public schools, there is nothing in the article that would persuade me to favor one course of action over another.[36]

This lack of immediate policy relevance of one sociological research report can be overgeneralized. Although much research is of narrow interest, devoid of practical implications, and presented in a less than comprehensible manner, principles can be gleaned from the literature, but not necessarily by the average professional practitioner. Rothman's[37] recent effort to summarize such principles is a noteworthy example of what is possible given skill, time and resources.

The different orientations of researchers and practitioners has frequently been cited as another barrier to the use of research.[38] Practitioners tend to rely on precedent, common sense, and intuition much more than they do on research findings.[39] Researchers and practitioners operate in different social worlds, are concerned with different types of questions, have different skills and, further, do not hold very high opinions of each other.[40] Even in clinical psychology, where the research and clinical roles are supposed to be combined, there apparently has been limited success in integrating the two.[41] Given these differences it is hardly surprising that researchers often do not study problems of immediate concern to practitioners or that practitioners tend to ignore research reports.

Practitioners' reluctance to listen to researchers is understandable since researchers rarely bring tidings of joy. They are more often the messengers of bad news. Social workers and other human service professionals are frequently confronted with research demonstrating that they have little or no effect on their clients.[42] This is not only difficult for practitioners to accept,[43] but it

is equally difficult for researchers who anticipate that they will be subject to criticism for not supporting conventional wisdom.[44] But even when the individual professional is open to modifying his or her practice, his or her agency may be resistant to change.

The professional school is the logical place to train practitioners to be innovative, to base their practice on research and to equip them to understand research reports. Unfortunately, the evidence available suggests that students often graduate feeling that their research courses were least helpful, that their instructors and classmates had ambivalent attitudes toward research, and that research, while in some sense important to the profession, was an academic apendage.[45] Studies that measure the amount of research learning of social work students at the master's level have found that students' knowledge of research changes little if at all during their professional education and that gains made early in their professional schooling are often lost before graduation.[46]

The failure to equip students to deal with research in practice is by no means unique to social work. Neither is it solely the fault of research professors. Socialization into a profession should cultivate student appreciation for the role of research. But socialization can just as easily indoctrinate them into the belief system of a profession that inhibits or discourages systematic inquiry. For example, in discussing the role of research training for psychotherapists, a recent president of the American Psychoanalytic Association suggests that research training can be harmful to trainees and should be conducted only after they have been fully inducted into the clinical fraternity. He warns,

> . . . the banner of research minded objectivity can be captured and used to defy well established clinical insights, or to challenge the need for the guidance of informed teachers under the guise of freedom of inquiry, or to serve in the struggle of the detached scientist-student against involvement in an affectively charged clincial learning process. In these senses, resistance (in the technical meaning of the word) can indeed motivate the research attitude and thus become a real obstacle both to adequate clinical training and to significant clinical research.[47]

This ambivalence about the role of research in professional training is evident in the 1969 Curriculum Policy Statement adopted by the Board of Directors of the Council on Social Work Education which relaxed the research requirements of graduate schools.[48] While this has provided a welcome opportunity for schools to experiment with research curricula it also apparently has lessened students' exposure to research content.[49]

Directions for Social Work

There is little evidence that social workers are fond of research. In that regard, they are probably similar to other pro-

fessionals. Practicing physicians, lawyers, ministers, and assorted other professionals do not engage in research. They are not avid readers of research journals. Undoubtedly, social workers should be more research-minded than they are. How can things be changed?

From the general discussion of research utilization, several important conditions for facilitating the use of research can be identified. First, research findings must be relevant to practice. Second, the practical applications must be explicit. Third, this packaged information must be disseminated effectively to the potential users of the study. Fourth, the users need to have the skill and the incentive to change their professional behavior in accord with the new knowledge.

Social work needs to make progress in all of these areas. The research productivity of the profession is very low. Few social workers train for research careers and of those trained fewer actually engage in research. Only recently has it been realized that basic research findings from the social and behavioral sciences are difficult to translate into practice principles. Social workers need to produce more practice-relevant research and be more diligent in sifting the social science literature for practice prescriptions. The information that has been developed is not effectively packaged or disseminated to students or practitioners. There is a need to develop new ways of reaching them. Finally, incentive systems should be designed that encourage practitioners to adapt to new knowledge. Why should they discard old practices? What are the consequences of not doing so? If a farmer fails to adopt the latest technology and agricultural methods, the results are immediate and clear. If a physician uses an untested treatment, he or she may be sued. But what happens to a caseworker who practices in the same way for forty years? Does it make any difference?

The research utilization models reviewed earlier provide some clues to the linkages that might be developed to accomplish these goals. The Research, Development and Diffusion model suggests that we need to pay more attention to the development and testing of effective professional interventions before they are adopted. The Social Interaction model suggests that scholarly journals are not the most effective way of communicating with practitioners, however helpful they are to researchers. To disseminate new knowledge throughout a profession the opinion leaders in the practitioners' social networks need to be reached--and they are not likely to be university-based researchers. Finally, the Problem-Solver approach indicates that the need for new information and the testing of new practices should originate from the individual practitioner. Thus, a research orientation should be integrated with practice skills. Only when there is a spirit of inquiry and a readiness to innovate at the level of the practitioner will external information make a lasting impact on practice.

NOTES

1. National Association of Social Workers, Building Social Work Knowledge (New York: NASW, 1964).

2. Ernest Greenwood, "Attributes of a Profession," Social Work, Vol. 2, No. 3 (1957), pp. 45-55.

3. William Goode, "The Theoretical Limits of Professionalism," in The Semi-Professions and Their Organization, ed. A. Etzioni (New York: Free Press, 1969).

4. Dan Lortie, "The Balance of Control and Autonomy in Elementary School Teaching," in Etzioni, op.cit.

5. Barrie Thorne, "Professional Education in Law," in Education for the Professions of Medicine, Law, Theology, and Social Welfare, ed. E. Hughes et al. (New York: McGraw-Hill, 1973), pp. 101-168.

6. Barrie Thorne, "Professional Education in Medicine," in Hughes et al., op.cit., pp. 17-99.

7. Jack Rothman, "Development of a Profession: Field-Instruction Correlates," Social Science Review, Vol. 51, No. 2 (1977), pp. 289-310.

8. Goode, op.cit., p. 287.

9. Everett C. Hughes, "Introduction," in Hughes et al., op.cit., pp. 15-16.

10. Goode, op.cit., p. 282.

11. Howard R. Davis, "Foreward," in Putting Knowledge to Use: A Distillation of the Literature Regarding Knowledge Transfer and Change, ed. Edward Glaser et al. (Los Angeles: Human Interaction Research Institute, 1976).

12. Glaser et al., op.cit.; and Ronald G. Havelock, Planning for Innovation Through Dissemination and Utilization of Knowledge (Ann Arbor, Mich.: Center for Research on Utilization of Scientific Knowledge, 1969).

13. Glaser et al., op.cit., pp. 65-66.

14. Ibid., p. 9.

15. Ibid., p. 31.

16. Havelock, op.cit., pp. 11-15.

17. Ibid., pp. 10-11.

18. Ibid., pp. 11-15.

19. Susan R. Gortner, "Research for a Practice Profession," Nursing Research,

Vol. 24, No. 3 (1975), pp. 193-197; and S. R. Gortner and Helen Nahm, "An Overview of Nursing Research in the United States," Nursing Research, Vol. 26, No. 1 (1977), pp. 10-33.

20. Gortner and Nahm, op.cit., p. 10.

21. Shake Ketefian, "Application of Selected Nursing Research Findings into Nursing Practice: A Pilot Study," Nursing Research, Vol. 24, No. 2 (1975), p. 91.

22. Carol H. Weiss, Evaluating Action Programs: Readings in Social Action and Education (Boston: Allyn and Bacon, 1972), pp. 10-11.

23. M. Q. Patton, P. S. Grimes, K. M. Guthrie, N. J. Brennan, B. D. Dickey, and D. A. Blyth, "In Search of Impact: An Analysis of the Utilization of Federal Health Evaluation Research," unpublished ms. (Minneapolis, Minn.: Minnesota Center for Social Research, University of Minnesota, 1975), pp. 2-3.

24. Joseph Eaton, "Symbolic and Substantive Evaluative Research," Administrative Science Quarterly, Vol. 6, No. 4 (1962), pp. 421-442.

25. Aaron Rosenblatt, "The Practitioner's Use and Evaluation of Research," Social Work, Vol. 13, No. 1 (1968), pp. 53-59.

26. Betsy-Lea Casselman, "On the Practitioner's Orientation Toward Research," Smith College Studies in Social Work, Vol. 42, No. 3 (1972), pp. 211-233.

27. Stuart A. Kirk, Michael Osmalov, and Joel Fischer, "Social Workers' Involvement in Research," Social Work, Vol. 21, No. 2 (1976), pp. 121-124.

28. Ibid.

29. Eaton, op.cit.; and Stuart A. Kirk and Joel Fischer, "Do Social Workers Understand Research?" Journal of Education for Social Work, Vol. 12 (Winter 1976), pp. 63-70.

30. Kirk, Osmolov, and Fischer, op.cit.

31. W. D. Garvey and B. C. Griffith, "Communication in a Science: The System and its Modification," in Communication in Science, ed. A. deReuck and J. Knight (Boston: Little, Brown, 1967), pp. 6-36.

32. A. O. H. Roberts and J. K. Larsen, Effective Use of Mental Health Research Information (Palo Alto, Calif.: American Institute for Research, 1971).

33. J. S. Coleman, E. Katz, and H. Menzel, Medical Innovation: A Diffusion Study (New York: Bobbs-Merrill, 1966).

34. Rosenblatt, op.cit.; and Kirk, Osmolov, and Fischer, op.cit.

35. Carol H. Weiss, "Introduction," in Using Social Research in Public Policy Making, ed. C. H. Weiss (New York: Lexington Books, 1977), pp. 1-22.

36. James A. Davis, "On the Remarkable Absence of Nonacademic Implications in Academic Research: An Example from Ethnic Studies," in Social Policy and Sociology, ed. N. J. Demerath, O. Larsen, and K. F. Schuessler (New York: Academic Press, 1975), p. 234.

37. Jack Rothman, Planning and Organizing for Social Change: Action Principles from Social Science Research (New York: Columbia University Press, 1974).

38. Rosenblatt, op.cit.

39. Glaser et al., op.cit.

40. Ibid., pp. 47-49.

41. R. Pasework, B. Fitzgerald, L. Thornton, and R. Sawyer, "Icons in the Attic: Research Activities of Clinical Psychologists," Professional Psychology (August 1973), pp. 341-346; and Harold Leitenberg, "Training Clinical Researchers in Psychology," Professional Psychology (February 1974), pp. 59-69.

42. Joel Fischer, The Effectiveness of Social Casework (Springfield, Ill.: Charles C. Thomas, 1976); and Carol H. Weiss, Evaluation Research (Englewood Cliffs, N.J.: Prentice-Hall, 1972), pp. 126-128.

43. Kirk and Fischer, op.cit.

44. Aaron Rosenblatt, "Interpreting Null Findings of Evaluative Studies," Journal of Social Service Research, Vol. 1, No. 1 (1977), pp. 93-104.

45. Rosenblatt, op.cit.; and Stuart A. Kirk and Aaron Rosenblatt, "Barriers to Students' Utilization of Research" (Paper presented at the Annual Program Meeting of the Council on Social Work Education, Phoenix, March 1977).

46. Harris Goldstein, "Evaluating Optimum Conditions for Learning in the Research Experience of Social Work Students," unpublished ms. (1977); and A. Rosenblatt, M. Welter, and S. Wojchiechoski, The Adelphi Experiment: Accelerating Social Work Education (New York: Council on Social Work Education, 1976).

47. Robert S. Wallerstein, "The Role of Research Training for Psychotherapists," in Psychotherapy and Psychoanalysis, ed. R. S. Wallerstein (New York: International Universities Press, 1975), p. 341.

48. Council on Social Work Education, Manual of Accrediting Standards (New York: Council on Social Work Education, April 1971).

49. Sidney Zimbalist, "The Research Component of the Master's Degree Curriculum in Social Work," Journal of Education for Social Work, Vol. 10 (Winter 1974), pp. 118-123.

UNDERSTANDING THE UTILIZATION OF RESEARCH IN SOCIAL WORK AND OTHER APPLIED PROFESSIONS

by Richard L. Simpson

Physicians don't have conferences about the general idea that research should be utilized. They routinely adopt new research findings. When they have a conference on research utilization, its purpose is to explain a specific research development that doctors want to use. Neither do many lawyers worry about the principle of utilizing research. The basis of legal knowledge is not research, but codified tradition.[1] Social work stands uneasily between these extremes. Its leaders think their profession should do more research and utilize it, but they are not sure what the research should consist of or how to use it, so they have conferences like this one.

A long series of exhortations and agonizing self-appraisals has failed to generate a strong social work research tradition. I will describe some manifestations of this fact, and speculate about why it came to be. Evidence of the weak research orientation in social work includes (1) the absence of a firm knowledge base developed by the profession itself, and (2) a lack of research emphasis in social work journals. Possible causes include (1) intellectual faddism and conflict between segments of the profession, (2) people-orientation, and (3) tasks and career ladders that do not require one to do or use research.

The Knowledge Base: Journal Article Citations

Most of the knowledge used in social work writings is not created by social workers, but by people in other fields. In this respect social work is similar to other semiprofessions[2] but different from some academic disciplines and substantially different from more established professions. Table 1 suggests this pattern. It gives the distribution of professional or disciplinary affiliations, insofar as we could ascertain them, of authors cited in articles in selected issues of the journal Social Work; and comparable data for The American Sociological Review, the official journal of a relatively unsystematized academic field. (Data not shown here indicate that social workers wrote 85.3 percent of the articles in Social Work from its inception in 1956 through 1974, with no visible pattern of change. Taber and Shapiro[3] report slightly lower figures for three social work journals during an earlier period. We lack comparable data on journals in other fields. Our discussion concerns the authors cited in articles, not

TABLE 1
Academic or Professional Affiliations
Of Authors Cited in Selected Issues of Two Journals[a]

Social Work (Jan.)	Affiliation: %					
	Social Work[b]	Psychology[c]	Sociology[d]	Other[e]	Unknown	(N)
1960	41.9	25.6	14.0	5.8	12.8	(86)
1962	40.6	25.2	4.2	19.6	10.5	(143)
1964	23.7	25.4	6.8	5.9	38.1	(118)
1966	21.1	15.4	21.7	19.1	22.7	(299)
1968	24.5	34.9	12.2	10.4	17.9	(335)
1970	19.8	48.8	8.8	7.9	14.6	(328)
1972	32.3	8.9	18.7	17.9	22.1	(235)
1974	25.8	5.3	21.6	25.1	22.3	(283)
1976	40.9	28.5	5.0	4.3	21.4	(421)
Total	29.0	25.2	12.8	12.9	20.1	(2248)

American Sociological Review (Feb.)	Affiliation: %			
	Sociology[d]	Other[f]	Unknown	(N)
1966	54.0	33.2	12.7	(346)
1974	41.9	32.5	25.6	(539)
Total	46.7	32.8	20.6	(885)

[a]Patricia Rector and Andrew Smith collected and coded most of the data in Tables 1 and 2. David Galinsky, Maeda J. Galinsky, and Jane H. Pfouts helped identify psychologists and social workers who were not listed in the directories used for this table.

[b]Includes social work, social service, and social welfare.

[c]Includes psychology, psychiatry, and mental health and retardation.

[d]Includes sociology, social science, and human relations.

[e]Includes economics, medicine, magazine reporter, author, government official not identifiably working in one of the three listed fields, environmental health, history, community health, education, anthropology, biological sciences, mathematics, computer science, engineering, philosophy, urban studies, political science, rehabilitation and criminology, management, communications, human development, law, black studies, architecture, geography, organizational behavior.

[f]Includes psychology, social work, and the fields listed under "d" except philosophy, urban studies, communications, human development, black studies, architecture, and organizational behavior.

the authors of articles.

Citation data are from the January issues of Social Work for all even-numbered years from 1960 through 1976, and the February American Sociological Review for 1966 and 1974. (Lack of resources prevented an intended analysis of journal citations in two other applied professions, public health and medicine.) For each article, we counted how many times each author cited in the list of references or in footnotes was cited. (The reasoning was that an author cited twice has had greater impact than an author cited once.) We then looked up cited authors' disciplinary or professional affiliations in The National Faculty Directory and in directories of social workers, psychologists, and sociologists. We also counted authors not listed in the directories if we knew who they were, and consulted colleagues who identified many unlisted social workers, psychologists, and psychiatrists.

The incompleteness of the specialized directories and the reliance on a faculty directory for other fields distort the results in unknown ways. Applied professions may be underrepresented if numerous cited authors were agency personnel or other nonfaculty persons. Probably most unidentified authors of cited works were faculty members; if so, this distortion is minor. Moreover, we counted authors by their faculty affiliations rather than by their highest degrees; this artificially increased the representation of professions and decreased that of academic disciplines, since professional schools have far higher percentages of faculty with degrees in other fields than do academic departments. For example, the table counts a number of PhD sociologists as social workers because they taught in schools of social work, whereas hardly anyone counted as a sociologist lacked a doctorate in that field.

By the citation criterion, social workers contributed rather little to their own knowledge base. Social Work drew more heavily from the combined writings of psychologists and sociologists than from those of social workers. Its articles were noticeably lower than American Sociological Review articles in citing people from its own field. This situation does not simply reflect the difference between a profession that attacks multifaceted problems and a discipline that pursues a narrow body of knowledge as an end in itself. I am confident that a similar analysis of medical journals would show the applied profession of medicine outranking the academic discipline of sociology in citing authors from its own field. Medicine rests on nonmedical sciences such as physiology and biochemistry; but physicians learn something about these subjects, then do their own research and cite one another.

Social workers' reliance on other fields for knowledge is not wholly a bad thing. Writers in other fields provide worthwhile facts and insights for social workers. Psychologists, psychiatrists, and family sociologists study problems applicable to casework. Economists and sociologists know things that pertain to poverty and social welfare. Business administration, public administration, and sociology have knowledge of organizations that may help social work administrators.

But defining others as the prime experts on one's professional concerns has serious drawbacks. If policymakers see this happening, why should they ask a social worker's advice when they can get it from the horse's mouth? Why, in planning a family crisis intervention program, should they consult social workers to learn what psychiatrists have said? If social work can claim no special skill in running organizations, why shouldn't the government contract out rehabilitation programs to business firms?

A more insidious difficulty is the need to keep abreast of a scattered, unintegrated literature if one is to do social work research, teach it, or use it intelligently. Writers in social work books and journals integrate literature from other fields as best they can; but they must water it down so their readers can understand it, and they may not always understand it themselves. This would be true in any field that relied heavily on other fields for its knowledge. Each profession and discipline has its own jargon and tacit assumptions. Becoming familiar with the half-spoken mysteries[4] and jargon of just one body of knowledge is a tall order for researchers, let alone for average practitioners who are so busy doing social work that they have little time or inclination to read about it. The Babel of disciplines represented in social work publications may be one reason why research appeals to so few social workers. Perhaps the profession should free itself gradually from other fields and develop its own distinctive body of research, with its own concepts and methods, then let psychologists and sociologists try to plumb the mysteries of social work rather than the other way around. Unfortunately I have no recipe for how to do this.

Research vs. Nonresearch: Emphases of Journals

Whether the journals of professions and disciplines emphasize systematic empirical research suggests the importance they attach to research, and their practitioners' exposure to it. Table 2 shows what percentages of all articles reported empirical research in selected years of leading social work, public health, and sociology journals. Written instructions to the coder, given to her with brief discussion, were: "Count by year how many articles do vs. don't report empirical research. (Anecdotes or reports of successful programs without hard evidence aren't counted as 'empirical research.') Randomize order in which years are counted, to minimize effects of 'set' in subjective coding." The coder was a sociology graduate student. She expressed no difficulty in understanding the distinction or in following the instructions.

Social Work was the least research-oriented of the journals. In three of four years, one could read about two-thirds of its articles without encountering empirical research. (Weinberger and Tripodi's[5] analysis of four major social work journals from 1956 through 1965 found even fewer articles reporting empirical research than we found in Social Work.) The proportion of articles that did not report research was roughly half in The American Journal of

TABLE 2
Percentages of Articles Reporting
Empirical Research in Selected Years of Three Journals

	Articles Reporting Research: %	(N)
Social Work		
1962	31.6	(57)
1966	37.3	(51)
1970	47.9	(48)
1974	30.9	(68)
Total	36.2	(224)
American Journal of Public Health		
1967	50.8	(185)
1974	48.1	(133)
Total	49.7	(318)
American Sociological Review		
1962	76.7	(43)
1966	75.4	(57)
1970	61.2	(49)
1974	66.7	(117)
Total	69.2	(266)

Public Health, and ranged from about one-fourth to two-fifths in The American Sociological Review. The figure would approach zero in some medical specialty journals.

Professional Segments, Conflicts, and Fads

Fluctuating interests of social workers--let us call them fads--inhibit cumulation of research. Currently salient social problems become the centers of attention in rapid succession. Each new kind of social problem is likely to be represented by a self-conscious, organized segment of the profession that claims to speak for the proper mission of social work. Segments quarrel like sects, each arguing that its field of interest should be the dominant one. A newly vocal segment may castigate another for fiddling while Rome burns. The other reacts to defend its legitimacy as true work.[6]

Conflict of segments was well illustrated in the 1960s and early 1970s. Social Work had begun as charity and social reform, but for many years its most prestigious segment had been the caseworkers, whose psychiatric knowledge base gave support to their claims of "professionalism."[7] Then came the war on poverty. Social welfare and reformist community organization were again fashionable.[8] Reformers and welfare specialists directly or implicitly attacked caseworkers for applying band-aids to society's casualties instead of trying to eliminate the social conditions that produced the casualties.[9] Caseworkers reacted with predictable defensiveness.[10] This argument died down as the poverty program sputtered to its unhappy end, but then another segment of social workers stepped forward: the managers. The integrated human services movement[11] and the growth in size and complexity of social agencies led to a belief that social workers should learn more about management techniques.[12]

The contents of Social Work have reflected these changes. Reading volume years in random order, I classified every full-length article listed in the Table of Contents from 1956 through 1974 according to its primary emphasis on one or another "object of manipulation" by the social worker. The three objects of manipulation and the professional segments they represent are (1) individual behavior, the province of casework and groupwork, (2) society and its institutions, stressed by community organizers and welfare specialists, and (3) management of social work organizations and human services systems. These categories are described more fully in the notes.[13]

Topical distributions of Social Work articles show clear shifts of emphasis (Table 3). Individual-oriented articles fell from more than 80 percent in the early years to 30.2 percent in 1974. The lowest percentage of individual articles during the first eight years exceeded the highest percentage since 1964. Society articles rose sharply; in no year since 1963 were they a smaller proportion of articles than in any year through 1962. Managment emphasis grew somewhat less rapidly from about 1968 onward.

TABLE 3
Principal Object of Manipulation
Emphasized in Social Work Articles, 1956-1974

Year	Object of Manipulation: Individual: %	Society: %	Management: %	(N)	Unclassifiable: N
1956	81.5	14.8	3.7	(27)	26
1957	82.5	10.0	7.5	(40)	10
1958	76.3	10.5	13.2	(38)	18
1959	87.0	8.7	4.3	(46)	9
1960	85.1	6.4	8.5	(47)	9
1961	70.5	13.6	15.9	(44)	13
1962	84.2	10.5	5.3	(38)	19
1963	70.7	17.1	12.2	(41)	17
1964	65.9	27.3	6.8	(44)	11
1965	64.4	17.8	17.8	(45)	14
1966	57.4	27.7	14.9	(47)	3
1967	43.9	43.9	12.2	(41)	10
1968	68.2	13.6	18.2	(44)	6
1969	43.6	38.5	17.9	(39)	6
1970	43.2	29.5	27.3	(44)	4
1971	44.7	26.3	28.9	(38)	8
1972	44.1	47.5	8.5	(59)	14
1973	38.5	38.5	23.1	(52)	19
1974	30.2	43.4	26.4	(53)	14
Total	60.9	24.4	14.6	(827)	230

A profession ought to redirect its interests from time to time. The world does not stand still; neither can a profession. But continual struggles over the mission of the field may impair the growth of a research tradition in several ways. (1) Time, effort, and journal space that might have been devoted to research are given over to polemics. (2) Much of the literature is not objective analysis, but dogma. Ideology can be a good starting point for research--Marxism, for example, has led to enrichments of sociology that are useful whether or not one is a Marxist -- but it is only a beginning, and not enough social workers have harnessed their sectarian beliefs to the kind of research that is useful or persuasive to someone who does not already agree with them. (3) Social work segments appear unable to live and let live. Their behavior contrasts with that of, e.g., modern medicine, whose specialties are not always friendly but do not spend much time in disputes about "the" task of the profession. The relatively peaceful coexistence of medical specialties helps them all to develop clear-cut research traditions. Small wonder if social workers have trouble creating a coherent body of research when their journals abound in confusion over the profession's proper object of attention. (4) Foci of social work interest have sometimes changed in direct response to government policies. This was certainly the case when the emphasis shifted from casework to welfare and reform in the 1960s. The same thing happens in other fields, including academic disciplines whose researchers go where the money is.[14] To some extent it may be inevitable, if the government is the only source of research and program money. It may be desirable, if government spending patterns reflect the most pressing needs the profession is equipped to deal with. But it means that research problems may change too often for the research to be cumulative, and it means that social workers are not setting their own research agenda but are letting it be imposed from outside.

People-Orientation

Social workers typically are far more interested in working directly with people than in abstract knowledge. Rosenberg,[15] studying undergraduates in eleven universities, found that social work ranked first among eighteen occupations in the percentages of students who placed high value on the opportunity to work with people and be helpful to them, but eleventh in the value its students placed on creativity. Roe[16] and Davis[17] reported similar findings including extremely low "theoretical" interest among social work students. White[18] found that 58 percent of the graduate social work students he studied had been academic underachievers during their undergraduate years, as compared with 37 percent of all undergraduates. One may speculate that social work students want to get on with the job of helping people, and regard their academic study more as a bothersome hurdle than as an aid.

Faced with these student attitudes, educators who want to teach research skills and orientations have an unenviable task. Kirk's[19] paper prepared for this conference suggests that they do not usually succeed. He summarizes studies showing that most social

workers avoid reading research,[20] seldom apply it in their work,[21] and may reject it out of hand if it contradicts their preconceptions.[22] Similar conditions prevail among nurses, whose people-oriented work values resemble those of social workers.[23]

Administrative Career Ladders

Success in social work means moving into supervision and administration. The profession's highest prestige and income go to administrators, not to outstanding direct-service practitioners. A career ladder of this kind puts very little premium on specialized technical knowledge. It provides scant incentive to produce or consume research, except to read boiled-down summaries that enable one to talk a fast game. Social work is not alone in this respect. The irrelevance of research orientation to careers that culminate in administration is a common characteristic of service professions including education and nursing.

There is, of course, an immense research literature on organization and management; but I am not aware of any evidence that familiarity with this research makes better managers. (For example, I have never heard it claimed that the university departments where organizational research is done are better managed than departments of, say, botany or Spanish.) Even those administrators who are firm believers in research are confronted every day with time-consuming management routines and emergencies. They cannot postpone action on these matters; but they can put off their research reading until another day, which somehow never comes.

Administrators set the tone of an organization. Subordinates do not simply follow instructions. They perceive their superiors' implicit priorites and behave accordingly. If the boss ignores research, so will the workers. Even if social work educators attract and select more students who are interested in research, and make research a more integral part of the curriculum than it has been, there is no guarantee that a research orientation will survive exposure to social work practice. The effects of professional socialization are not yet well understood, but there is reason to believe they are eroded unless they fit the structures of practice settings.[24] If newcomers to a social agency see their colleagues making do and getting ahead with a combination of humanitarian impulse, occupational folklore, and common sense, we cannot expect them to behave otherwise for very long.

. . . . . .

If we think the utilization of research would improve the direct practice of social work (whether or not it would improve its administration), we must answer several questions. How can schools of social work get more students who are receptive to research? How can research be brought from the periphery into the core of social work education? (When research is relegated to separate

courses and is not built into core courses on how to do social work, it is likely to be viewed with the same distaste as the German language requirements of PhD programs.) The toughest question is this: How can we make research an indispensable part of practice, so a social worker will turn naturally to it when faced with difficult problems?

If I thought I knew the answers, I would say what I think they are. I have just one suggestion, from my analysis of journal article citations. If social workers developed their own distinctive knowledge base and became less dependent on psychology and sociology, their research might become more intrinsically appealing to its intended audience of colleagues and more visibly applicable to the day-to-day problems of social workers. The doctors have taken what is useful to them from the biological scientists, but have kept their scientific autonomy. Why shouldn't social workers liberate themselves in the same way?

NOTES

1. Wilbert E. Moore, The Professions (New York: Russell Sage Foundation, 1970), p. 242.

2. Dan C. Lortie, "The Balance of Control and Autonomy in Elementary School Teaching," in The Semi-Professions and Their Organization, ed. Amitai Etzioni (New York: Free Press, 1969), pp. 1-53.

3. Merlin Taber and Iris Shapiro, "Social Work and Its Knowledge Base," Social Work, Vol. 10 (October 1965), pp. 100-106.

4. Evertt C. Hughes, Barrie Thorne, Agostino M. DeBaggis, Arnold Gurin, and David Williams, Education for the Professions of Medicine, Law, Theology, and Social Welfare (New York: McGraw-Hill, 1973), pp. 1-16.

5. Roslyn Weinberger and Tony Tripodi, "Trends in Types of Research Reported in Selected Social Work Journals, 1956-65," Social Service Review, Vol. 43 (December 1969), pp. 439-447.

6. Rue Bucher and Anselm Strauss, "Professions in Process," American Journal of Sociology, Vol. 66 (January 1961), pp. 325-34.

7. Herbert Bisno, "How Social Will Social Work Be?" Social Work, Vol. 1 (April 1956), pp. 12-18; and Peter Leonard, "Professionalization, Community Action and the Growth of Social Service Bureaucracies," in Professionalization and Social Change, ed. Paul Halmos, Sociological Review Monograph 20 (Keele, Staffordshire: University of Keele, 1973), pp. 103-117.

8. Alfred J. Kahn, "From Delinquency Treatment to Community Development,"

in The Uses of Sociology, ed. Paul F. Lazarsfeld, William H. Sewell, and Harold L. Wilensky (New York: Basic Books, 1967), pp. 477-506; Robert R. Mayer, Social Planning and Social Change (Englewood Cliffs, N.J.: Prentice-Hall, 1972), pp. 8-13; Robert Morris, "Editorial Page," Social Work, Vol. 11 (January 1966), pp. 2, 128; and Alvin L. Schorr, "Editorial Page," Social Work, Vol. 11 (January 1966), p. 2.

9. Leonard, op. cit., pp. 109-110; Mildred Pratt, "Partisan of the Disadvantaged," Social Work, Vol. 17 (July 1972), pp. 66-72; and Martin Rein, "The Cross-roads for Social Work," Social Work: The British Quarterly Journal, Vol. 27 (October 1970), pp. 18-27.

10. Anna Margaret McLauchlin and Helen Pincus, "The Role of a Clinical Social Worker in a Changing Society," Journal of Education for Social Work, Vol. 10 (Spring 1974), pp. 59-64; and Harry Specht, "The Deprofessionalization of Social Work," Social Work, Vol. 17 (March 1972), pp. 3-15. Similar battles erupted in other service professions during the 1960s and have not ended. See, for example in public health, Roger M. Batistella, "Toward a Definition of Health Services Management: A Humanist Orientation," International Journal of Health Services, Vol. 4 (Fall 1974), pp. 701-721; Lorin J. Kerr, "The Poverty of Affluence," American Journal of Public Health, Vol. 65 (January 1975), pp. 17-20; and Milton Terris, "Evolution of Public Health and Preventive Medicine in the United States," American Journal of Public Health, Vol. 65 (February 1975), pp. 161-169. In city and regional planning, see Paul Davidoff, "Advocacy and Pluralism in Planning," Journal of the American Institute of Planners, Vol. 31 (November 1965), pp. 331-338; John F. Kain, "Rampant Schizophrenia: The Case of City and Regional Planning," Journal of the American Institute of Planners, Vol. 36 (July 1970), pp. 221-223; and Jerome L. Kaufman, "Contemporary Planning Practice: State of the Art," in Planning in America: Learning from Turbulence, ed. L. Godschalk (Washington: American Institute of Planners, 1974), pp. 111-137. See for discussions of advocacy in social work, Norman V. Lourie, "The Question of Advocacy: The Many Faces of Advocacy," Public Welfare, Vol. 30 (Spring 1972), pp. 12-15. In city and regional planning, see Robert J. S. Ross, "The Impact of Social Movements on a Profession in Process," Sociology of Work and Occupations, Vol. 3 (November 1976), pp. 429-454. For a general attack on traditional professionalism and a polemic for social reform as the job of the professions, see Joel Gerstl and Glenn Jacobs, eds., Professions for the People (New York: Schenkman, 1976).

11. Council of State Governments, Human Services Integration: State Functions in Implementation (Lexington, Ky.: Council of State Governments, 1974; and Robert Morris, "Editorial Page," Social Work, Vol. 19 (September 1974), pp. 519-531.

12. Neil F. Bracht, "Health Care: The Largest Human Service System," Social Work, Vol. 19 (September 1974), pp. 532-542.

13. The Individual category includes articles focusing on behavior, interaction or psychological functioning of individuals or small groups, e.g., families, as the object in need of change. The Society category includes articles concerned with structure, functioning, or desired changes of the society, the community, or social institutions such as school systems or patterns of

income distribution. Societal articles view the broad social environment, not the immediate interactional environments of individuals, as the object in need of intervention. Included in the Society category are examinations of the welfare system and exhortations to social workers to act as community organizers or political advocates. Articles in the Management category regard the organizations that deliver social services as the objects to be manipulated. They address the structure of delivery systems or the techniques of managing social agencies and programs. Unclassifiable articles treat such subjects as the education of social workers, supervision techniques, sociological discussion of ethnic subcultures with no direct application to practice, discussion of current legislation or court cases with no implications for practice classifiable under any of the three headings, strictly professional matters such as the desirability of private practice, exhortation to do research, description of research methods, and research reports not explicitly related to the practice of social work.

14. Richard L. Simpson, "Expanding and Declining Fields in American Sociology," American Sociological Review, Vol. 26 (June 1961), pp. 458-466.

15. Morris Rosenberg, Occupations and Values (New York: Free Press, 1957), pp. 17-18.

16. Anne Roe, The Psychology of Occupations (New York: Wiley, 1956), pp. 173-174.

17. James A. Davis, Great Aspirations (Chicago: Aldine, 1964), pp. 173-177.

18. Clyde R. White, "Social Workers in Society: Some Further Evidence," Journal of Social Work, Vol. 34 (1953), pp. 161-164.

19. Stuart A. Kirk, "Understanding the Utilization of Research in Social Work and Other Applied Professions" (Paper presented at the Conference on Research Utilization in Social Work Education, sponsored by the Council on Social Work Education, New Orleans, October 1977).

20. Aaron Rosenblatt, "The Practitioner's Use and Evaluation of Research," Social Work, Vol. 13 (January 1968), pp. 53-59; and Stuart A. Kirk, Michael Osmalov, and Joel Fischer, "Social Workers' Involvement in Research," Social Work, Vol. 21 (March 1976), pp. 121-124.

21. Betsy-Lea Casselman, "On the Practitioner's Orientation Toward Research," Smith College Studies in Social Work, Vol. 42 (1972), pp. 211-233.

22. Joseph Eaton, "Symbolic and Substantive Evaluative Research," Administrative Science Quarterly, Vol. 6 (March 1962), pp. 421-442; and Stuart Kirk and Joel Fischer, "Do Social Workers Understand Research?" Journal of Education for Social Work, Vol. 12 (Spring 1976), pp. 63-70.

23. Shake Ketefian, "Applications of Selected Nursing Research Findings in Nursing Practice: A Pilot Study," Nursing Research, Vol. 24 (1975), pp. 89-92; and Richard L. Simpson and Ida Harper Simpson, "Women and Bureaucracy in the Semi-Professions," in The Semi-Professions and Their Organization,

ed. Amitai Etzioni (New York: Free Press, 1969), pp. 196-265.

24. Eliot Freidson, Profession of Medicine (New York: Dodd, Mead, 1970), pp. 88-90.

PART II

IDENTIFYING RESEARCH PRIORITIES

RESEARCH PRIORITIES IN SOCIAL WORK EDUCATION:

A COMMUNICATION TO COLLEAGUES

by Jerry S. Turem

It is with great pleasure that I share some of my thoughts on social work research and its priorities with my social work colleagues. My directive from Aaron Rosenblatt of CSWE indicates that I should address three questions: (1) What are the criteria for identifying research priorities? (2) Once these are agreed upon, what are some suggested areas calling for priority attention? (3) What can be done to increase attention to these priorities?

I shall address these questions in the context of my work in a nonprofit, full-time, competitive policy research organization. With this background, I am quite program- and policy-oriented, with relatively little experience in profession-oriented research, although much of my work at The Urban Institute has focused on the problems of priority setting for research.

My social services program has had at least three projects with the primary intention of assisting HEW agencies to develop research plans and priorities. Some of our other programs have developed plans for DoT, HUD, and LEAA. Our experience has convinced me of the frustrations in setting research priorities in the complex environment of public programs, and also of the necessity of making the attempt periodically. And not because it is not possible to set priorities, only that they change frequently. Let me make my general argument clear at the outset.

1. There is no way to establish priorities in social work research that are likely to be met with high consensus, given the broad range of interests which the profession espouses, and especially given the highly developed sense of academic freedom which characterizes university-based researchers.

2. Nevertheless, I think that the schools of social work are letting down our profession. Much of the research being done is not directed at the important questions which have arisen over and over again in my contacts with public officials who are concerned with the programs and problems central to the social work profession.

3. An essential first step in providing answers to these

unresolved questions is genuine acceptance of a rigorous, empirical conception of research. The profession of social work shows signs of moving toward this conception but the move has not been far enough or fast enough.

4. Of the variety of potential criteria for setting priorities for social work research, most derive ultimately from expediency or faddishness on the one hand or custom and tradition on the other. While these must play some role, the essential criteria for priority setting must, in my view, be the knowledge needs of the programs and services with which social work is intertwined, and which are in fact the reason for the profession's existence.

This line of reasoning will lead me to suggest a broad array of research ideas which I view as necessary for our field and for the programs with which we are associated.

First I will attempt to define my frame of reference so that we will share a common sense of what I mean when I use the term "research." I do not wish to take scarce time in this paper sinking into irrelevant semantic debates. Basic, applied, descriptive, etc., terms applied to cubbyhole research activities are best left to some other time.

Research is not wisdom nor is it necessarily insight. It is a rigorous, systematic search for answers to precisely stated questions using empirical facts, properly and sensitively analyzed which results in verifiable knowledge. Some of the issues are highlighted in the following excerpt from Paul Leedy:

> Unfortunately, many students have labored under the false impression that looking up a few facts and writing them down in a documented paper is research. Such activity is, of course, nothing more than fact finding and fact transcribing. No amount of transfer of information from one place to another, even though the act of transportation is acknowledged by footnote, can be dignified by the term research. Transfer of information, transportation of fact from one place to another, is simply that, nothing more! Yet the strange misconception that fact transferral is research persists; and, even more disconcerting, it grows in magnitude as the student progresses through the formal learning structure from grade school to college and even from college to graduate school. What goes on in the grades and throughout high school, bearing the misnomer of research, is further magnified and encouraged during the undergraduate years in college. The deception is enhanced at the college level by a more glorified terminology. Fact transportation in college is frequently exalted by calling the end product a "research report" or a "research document." Report, perhaps; and document, maybe--but research? Not at all.
>
> The net result of all this is that the student becomes more and more deeply imbued with false concepts and incorrect conditioning. The student has never been taught; rather, he has been permitted

> to go unwittingly on his way without ever learning the true nature of research. He has never learned the distinguishing characteristics which differentiate true basic research from spurious fact accumulation.[1]

I cite this because a good deal of the material labeled "empirical" in social work research is case studies or bibliographic essays, neither of which, despite the wisdom and insight which can be gained from case studies (and poetry) and the scholarliness of the essays, qualify as research as I use the term.

I do not mean to imply that one cannot learn and teach a great deal from case studies, as one can from teaching and learning from novels, poetry and drama. These sources all may yield great and useful insights into human behavior and may even be useful in the political process, but none is research. In a case study one does not know for sure what variables lead to which outcomes, how replicable those outcomes are, or what factors may be influencing the outcomes outside the framework chosen for presentation. Typically, there is no theory, no control and no real analysis. The activity that I consider research has a picture of the presumed reality and its connections--call it theory, if you wish. It poses very specific statements to be proved unequivocally right or wrong, which means it says exactly what the relationships are of the variable of concern when the others are controlled and what the predicted outcome would be. Call these hypotheses, if you wish.

I will not try to say that this is easy. The problems with which social work deals are so complex that there are literally thousands of subproblems which should be researched in a systematic way to eventually answer a given overall question. There could be entire careers spent just developing the measurement tools which eventually permit the questions to be addressed. If the measurement tools are not calibrated, reliable and valid, one does not know if one's eventual findings are of anything real.

Similarly, bibliographic essays, even those with substantial creativity and work, are not research, though they may reflect the highest ideals of scholarship. Their problem, like that of case studies, is that they may provide insights, but they are presentations and syntheses of information from the past into configurations which are yet to be tested. These new configurations provide theory and hypotheses, but they are not research. All are essential to the overall enterprise of knowledge development. I do not debunk the insights gained from such activity. I only argue that they are not research, but theory and hypothesis development. The research is the empirical fact-finding activity designed with controls which determines whether the hypothesis is true or false.

Whether, say, an inventory of the number of persons in substandard living conditions is research will depend on the rigor with which it is done. It may be useful in political discussions. Whether it adds anything useful to validated knowledge is the question.

To the extent the survey follows the principles of sampling design, the variables explicated, the implicit definitions and assumptions articulated and the instruments reliable and valid, then it is probably research. In this sense, the type of studies anthropologists do or special systematic studies of unique events (e.g. Gouldner's Wildcat Strike[2]) would be research. If the facts were based on some reporter wandering through a low-income section of town one night interviewing a hit or miss group, it could not be considered research. Either could get some press, and possibly yield some persuasive testimony. I would not, however, propose that the latter be classified as research, despite its possibly substantial political and publicity value.

Recent Research in Social Work: A Review

This view of research and the stress I place on it derives in part from my sense of where the field of social work is at the moment. We have little knowledge in the sense of replicable and demonstrable outcomes of rigorous research, either of social services or of the technology of helping. This does not mean we know, in the general sense, nothing, nor that "we don't do any good." Social work relies importantly on the skills and intuition of practitioners, and we have as a collective a great deal of practice wisdom and experience. We also have a store of positive case studies of which we can be proud.

We make a serious mistake, however, when we believe a profession such as ours can compete for scarce resources in the public arena or even have a body of knowledge to transmit to students with no more than that. I think we cannot justify the arguments we make for universality, for greater resources, or redesign of programs solely on case studies, anecdotes, and practice wisdom. We have, from time to time, tried to defend our lack of knowledge by pointing out, reasonably, the difficulties of measuring some of the social or psychological processes into which we intervene. Such defense of the absence of rigorously validated facts has, I think, sapped the credibility of social workers in the political arena. Arguments that focus on social problems, the efforts of social workers to meet those problems, and case studies or anecdotes of success are in my view perhaps good professionalism, but poor politics and certainly poor knowledge development. It is self-serving and shortsighted for us as a profession to continue to denigrate the need to articulate and test what we do and to argue that we "know" we do good. If we cannot show our results in ways that outsiders can understand and accept as valid, if we cannot clearly articulate those goals we claim we can achieve, then the skepticism of a growing number of those outsiders is justified. The schools of social work in their research activities are, or should be, the key source of that validated knowledge which gives our profession a secure foundation. Just because, at the practice level, we rely heavily on "creative use of self" and on trained intuition does not mean that

our researchers and policy makers need be fuzzy thinkers or that the research performed be without rigor. Scott Briar put it succinctly when he said:

> Social work and social work education currently are under broad attack from various sources. A central theme of these attacks is that social workers and social work programs are not effective and therefore deserve less financial support. This charge is embarassing because the profession cannot readily refute it. While it probably is true that some of the critics are using the question of effectiveness to mask other motives for attacking social programs, we lack the credibility to make a countercharge if we cannot satisfactorily answer the ineffectiveness criticism. If all we can say is, "Well, we can't prove we are effective, but that's not the real reason you are attacking us," then social workers' motives also may be questioned. Moreover, we owe it to our supporters and to our clients to know how effective we are and to demonstrate what we are doing to increase our effectiveness.[3]

Dean Briar also made another point with which I am in full agreement and which will inform a good deal of the remainder of this paper.

> decisions about support for social work and social programs are ultimately political decisions. Even if today we could show beyond doubt that social workers are extremely effective at what they do, we still would be in trouble. This is not, however, the same as saying that effectiveness is irrelevant to such decisions. In these days of cost-benefit analysis, one of the first questions to be asked about a program is whether it has demonstrated effectiveness. If we cannot show this, or at least demonstrate that we are making substantial efforts to increase our effectiveness, we lose on the first round and our standing in the political arena is thereby seriously weakened. Our efforts to improve our situation politically may fall short if we do not make a vigorous effort to deal with the effectiveness issue.[4]

Given this vision of the interrelationships between social work programs, schools of social work, and the political arena which sustains the profession, it is clear to me that an overarching concern in developing the research agenda and priorities for social work must be the problem of determining effectiveness with the substantial scope which that implies. This goes well beyond such familiar questions (nonquestions actually) as "Is casework effective?" although establishing which methods work for what problems is part of the agenda. Casework and casework practitioners simply should not bear the burden alone of the issue of effectiveness, as Briar pointed out in the paper cited. Social work has long had many interests and techniques, ranging from those focusing on people changing to those concerned with institution and community changing. If, for some social problems, casework and one-on-one interventions are ineffec-

tive or inappropriate, the profession is, in my view, flexible and creative enough to move on to other methods to deal with them. I am prepared to examine critically what we do and the results we achieve because I am confident of the profession's ability to find ways to get the job done. Yet we will only seek these alternative methods if our knowledge about what we currently do is reasonably reliable and complete. We as a profession, the programs with which we are associated, and the people and problems we claim to address far outstrip the resources available. We cannot as a profession afford to squander these scarce resources on the ineffective and try to cover up the fact. Our critics and our competition for resources are by no means dumb. We will be found out and lose what we have. It is the schools and the researchers in the schools on whom the burden for development of knowledge should fall. If you fail, we may all fail.

If there is merit to this view at all, it suggests the necessity of finding out what is being done now by schools and the profession in terms of providing validated empirical knowledge. To this end we reviewed the content of professional social work journals, seeing this as a reflection of the way in which social work dealt with its knowledge base and outcomes.

Review of Social Work Journal Literature[5]

The Social Work Abstracts were reviewed for the years 1973-1976 and the first quarter of 1977. These abstracts contain sufficient information to determine the content and scope of the article, the empirical or nonempirical nature of the article, and the subject areas. The abstracts for the following major professional journals were reviewed: (1) Social Work, (2) Social Casework, (3) Social Service Review, (4) Clinical Social Work Journal, and (5) Journal of Social Welfare.

Over 710 abstracts were reviewed from these journals for the period 1973 through 1977.

The major contributors to the journals, 54 percent, were individuals associated with professional schools of social work. Practitioners accounted for 27 percent of the articles, with the remainder being contributed by faculty members of other university departments (15%) and other professionals (4%).

If the content of the articles were to be characterized by one word, it is "change." The most prevalent theme or tone of this period is change, the need for change in methods, change in program structure, change in social worker education, change in service delivery. Concommitantly, most notably absent is a body of literature that responds to these mandates for change.

Seventeen subject areas were noted, with 50 percent of the

articles concentrated in these areas: service methods, casework, and education and training of social workers. The remaining 50 percent were fairly evenly distributed among the other 14 subject areas, as can be observed from the following table.

TABLE 1
Subject Area of Abstracts Reviewed

	Subject Area	Percent
1.	Service Methods	27
2.	Casework	13
3.	Education and Training	10
4.	Alcoholism and Drugs	5
5.	Community Organization	5
6.	Ethics and Values	5
7.	Standards of Practice	5
8.	Aging	4
9.	Mental Health	4
10.	Reports of Original Research Projects	4
11.	Social Policy	4
12.	Health and Medical Care	3
13.	Crime and Delinquency	3
14.	Group Work	2
15.	History of Profession	2
16.	Civil Rights	2
17.	Housing	2

The examination of the empirical and/or nonempirical nature of the literature, however, is somewhat encouraging. In contrast to a similar analysis of social work periodical literature undertaken by Taber and Shapiro in 1965, this review found a significant increase in the number of articles that were empirical in nature, particularly with respect to the use of original and/or national data.[6] Additionally, reference to experience was the most prevalent kind of empirical material (23 percent) in the Taber and Shapiro analysis, whereas only 8 percent of the articles in the 1973-1977 period were based solely on experience through presentations of case histories or illustrations.

Table 2 illustrates the distribution of our reviewed abstracts with respect to their empirical or nonempirical nature. "Empirical material" was defined following Taber and Shapiro as "statements based on experience of observation or data pertaining to or founded on experiments." Nonempirical material included value preferences, recommendations for action, future trends in social work, policy issues relating to legislation, and so on. "Empirical material" as defined here for comparability with the Taber and Shapiro study

TABLE 2
Distribution of Abstracts Reviewed

Type of Work	UI 1977 %	T & S 1965 %
A. Nonempirical		
1. Service methods/principles	20	
2. Policy	10	
3. How to (run a program, etc.)	9	
4. Trends in social work	4	
Total	43	53
B. Empirical		
1. Studies - original data	26	
2. Theory	13	
3. Works incorporating national data	6	
4. Concepts	4	
Total	49	24
C. Experience		
1. Case history (illustrate concept or theory)	3	
2. Case illustrations (illustrate concept or theory)	5	
Total	8	23

includes much material that would not be considered research in the sense given above. The proportion of the literature that could be termed "research" is quite small.

Nonetheless, we found that 43 percent of the literature from 1973-1977 could be considered nonempirical in nature, whereas in 1965 this was 53 percent. In contrast to the earlier analysis, the amount of conceptual and theoretical literature shows a marked increase from 2 to 13 percent. This would appear to indicate that the profession is moving in the direction of converting its value statements and practice principles into verifiable statements which could then be tested or which are testable. This trend is more promising than its results to date. I am grateful that it is someone else's job at this conference to comment upon what is offered as research and what could be improved.

Establishing Priorities

Given some evidence that social work is beginning to do research,

what are the criteria through which priorities might be established for that research? Our knowledge needs, then, are like an enormous menu, and like all menus simply offer options to suit the tastes of the diners who determine what shall be selected. Selection by a given person does not remain constant from meal to meal, and, of course, the menu itself frequently changes. As Wallis and Roberts stated: "It is the application of 'scientific method' that is the hallmark of research. In a sense, the 'scientific method' is illusory, because there are no procedures, formal or informal, which tell a scientist how to start, what to do next, or what conclusions to reach."[7]

Yet to carry the analogy a bit further, there are ways to narrow choices from the long list. Some menus are specialized, some have items clearly superior in preparation or taste to others, some have varying prices, the health of the diner may eliminate some items or focus on others, and, of course, the general approval of relevant others in urging a try at one or another configuration for a meal is a consideration.

There are major problems which beset any attempt at priority setting. There probably have been dozens and dozens of reports both from within the agencies with which I have worked and from outsiders on priorities. What they all represent is a set of perspectives that simply may not be shared, that are too expensive, or that have payoffs in knowledge well after most of the incumbents are gone and when the policy or political opportunity to act is long past. If one has trouble setting priorities at the level of a given agency program, one must be more humble when talking to tenured faculty protective of their right to pursue questions of interest to the given researchers in a field like social work, whose boundaries are ill-defined.

There are, of course, ways in which priorities are or could be established. For example, priorities are typically established on the basis of crisis or relevance.

Crisis

If one accepts that federal priorities have a major influence on how research funds are spent and therefore what priorities are to be placed, then one can quickly identify crisis as an organizing principle. In HEW, various initiatives, fads, secretarial preferences, or potential legislative opportunities raise questions and a frantic call for information. When it is shown that not much is known, the research money flows. A crisis of a more subtle sort may have to play a major role sooner or later in shaping priorities in social work research. After the enormous growth in schools of social work due to the explosion of social services funds in the sixties and early seventies, the current, apparently indefinite period of program leveling is reducing demand for graduate social workers.

The viability of the profession and its schools appears to me to be closely tied to the fate of social service programs at the federal level and, in a nontrivial but somewhat lesser way, to the state level.

Without very systematic examination I can only offer my impressions--the program people are not, in some degree, willing any longer to support schools of social work just to build a profession. They now ask for relevance--both in the skills of graduates relative to actual program needs and research relevant to the policy and political support needs of the program. The school research faculties (my sample is about 20) seem distressed that the sources of research support will not fund their pet projects, and they often blame bureaucratic blindness or ignorance. A recent training report on public welfare agencies and role of schools of social work points out the considerable tension that exists between program people and the schools in that regard.[8]

Relevance

One hears regularly from program people that research coming from the schools of social work is not "relevant." What is relevant, of course, depends on one's view of the time frame and purpose of information generated through research. I have read scholarly books and articles by many of you. These materials were often profoundly useful aids in stimulating ideas and providing insight into certain issues. But much of it was not "relevant" in the sense that it was too general to help me when I wanted to determine how certain policies should be developed, or how agency managers could get their staffs to perform effectively or efficiently. This is not a criticism of the reports as much as a commentary on the ambiguity in the concept of relevance.

This is not, however, to say relevance as a criterion is irrelevant. One should ask if the results of a particular research project, which may not be known for years, will still address at that time a key issue or develop knowledge about people or interventions that will have lasting value to people actually working in these programs. From the perspective of public research funds, policy or program relevance is a crucial consideration and so influences how you set priorities.

"Hitting Where They Ain't"

Much research activity is shaped by fad or custom. Issues are chosen either because they are "in" at the moment or because they have become a familiar and comfortable, if no longer valid, fixture in the intellectual environment. Faddishness is upon us again as "the family" has gotten some political and press play. I am told that research funding sources, both public and private, are inundated

with proposals to do some or another piece of work related to the pressing need to find out something about the family. Many are rewritten proposals that were first keyed to earlier fads such as service integration, welfare reform, coordination, and deinstitutionalization. A look at published research in journals the past five years indicates 40 percent are what a cynical friend, a social work researcher in a major state university, calls "navel" research. The overall impression is of the researchers contemplating their own navels, studying old familiar problems in old familiar ways. An alternative way to develop research priorities is to determine what needs doing in terms of general criteria, to compare that with what everyone else is doing, and to move resources into areas that are being ignored. This may be difficult both politically and intellectually, but it is necessary to inject balance and closure into the research process.

Theory

One of the better ways to address priorities is to have a codified and systematic description of the behavioral world that one's creative vision sets forth. It is important to mention that generalities and theory are quite different, even though theory can address general phenomena. My belief is that we in social work are very good at developing high-level, abstract generalities whose empirical referents are so far away they can mean many things or nothing. Theory, on the other hand, moves to empirical referents fairly directly and generates testable hypotheses about key relationships postulated by the theory.

Recent work on welfare and income maintenance is a good example of creative theory building. When I first went to Washington, D.C. in 1968 to work on welfare, probably no more than a half-dozen persons understood it, its alternatives, and the dynamics underpinning it. There was no income maintenance simulation model to estimate relative effects of different options. The notions of work incentives, investigation of the effects of welfare on migration, fertility, and family formation were thought about by only a few. Today there is a virtual industry in Washington working on these issues. Today there are established analytic and theoretical tools. It is my notion that the social services are worse off now conceptually than welfare was in 1968. I see as a basic responsibility of schools of social work the development of theoretical and analytic tools in the area of human services comparable to those in the income maintenance area.

The Programmatic Context of Social Work Research Priorities

Crisis, relevance, counterbalancing fads and custom, and building from empirically based theory: these are all elements which shape research priorities. The focal point of these criteria,

however, and that which is central to the detailing of specific areas for research, is, in my opinion, the information and knowledge building needs of the services and programs with which the profession of social work is associated.

The Social Work Context

From where I sit, the central issues are not limited to "practice" in the sense Mary MacDonald espoused and which occupied then, as now, the bulk of social work research attention.[9] The casework technology of social work is only one of the important areas schools should be addressing.

If the key functions of social work are the understanding of behavior and social processes in order to intervene in them on behalf of clients, communities, or society as a whole, intervention techniques should certainly exceed one-on-one, psychiatrically oriented casework or groupwork. We are affected by our economy, political power, changing values and mores, the organizations in which we work and relate, an array of incentives and opportunities, and constraints and limitations in ourselves, in other people, and in society.

To me, the practice problems of social work range from the caseworker across the desk, to the management of organizations, to participation in the legitimizing of values in political activity. We must recognize to begin with that social work, unlike law and medicine, is not an entrepreneurial profession, but one tied to public and quasi-public programs and organizations. Human development, rehabilitation, and social services programs have developed under separate, categorical authorities at different times and are administered for the most part by separate units at the federal, state, and local levels. Their ends are often obscure and very often are not well-specified. Where one can discern objectives, they often reveal the programs which embody them to be working at cross-purposes. Programs are administered under widely varying formulae and are administered by local or state agencies, thus making controls over incentives and outcomes very difficult. Each has a target group, although they often overlap, and each has more or less developed its own constituency. Information on specific measurable outcomes is difficult to obtain, and even basic program data are not readily available. Since it is difficult to know who is being served, it is difficult to know just what the various eligibility requirements mean. It is even more difficult to know just how to address the issue of the proper role of various levels of government, much less the relevant place of what we call the "private" sector. The dynamics of the programs which respect to impacts, effects on the behavior of individuals, or the economic implications of such programs are not well-understood.

Because of the lack of clear goal specification, lack of data,

and the highly emotional advocacy of various program supporters, research and analysis is difficult to perform, and change, especially change that proposes alternatives to the existing methods of delivering services, are hard to define and to defend. It is clear that a basic rethinking of the ends of these programs and the financing and organization of them is required. This program environment is a conceptual muddle, while the programs are a complex set of administrative arrangements, financing mechanisms, eligibility rules, populations, skill needs, and program objectives. It is in the schools of social work that the broad view may be taken, exempt somewhat from the too narrow concerns of specific program administrations, yet the outcomes of this broadness must remain close to the broader issues faced by a range of program administrators.

As a result of mushrooming outlays without an effectiveness accounting, Congress put a ceiling on the formerly open-ended social services account, and a President twice vetoed Vocational Rehabilitation legislation and once the Older Americans Act, on the basis of too much cost for too little demonstrated success. I do not expect the Carter Administration to ask less hard-nosed questions. HEW is faced with responsibility for considering broad proposals for reform that do not preclude eliminating the programs as they are now understood and administered. Among the range of options for change and improvement are administrative reform, coordinating mechanisms such as proposed in the Allied Services Bill, special revenue sharing, and cash-outs into income maintenance or general revenue sharing. For some programs--i.e., VR--a tax subsidy approach might be examined so employers increase the number of handicapped hired. It may be possible to create special service districts to improve coverage and eliminate gaps or overlaps. There is, in sum, a wide variety of basic reform possibilities which should be examined, whose consequences we know little about. We should also understand a great deal more about the processes which affect those citizens we define as "in need" and about what those citizens themselves are about. We have too long focused primarily on psychic factors. We need to know more about their aspirations, how economic factors (especially how they try to maximize their self-interests) as well as political ones, influence them. We need to know much more about what constitutes the "help" of a helping profession.

Yet we find a set of very serious problems in knowing how to examine the programs, in defining the desired ends, and in understanding what interventions to use under which circumstances. The service technology itself is primitive. The outcome measures for most effects have not been designed. The difference between one or another delivery system or manpower mix cannot be assessed. What is abundantly clear is the lack of conceptual underpinning for determination of what works and what does not. Unlike hard science, or even compared to the conceptual and analytic underpinnings of analysis into income maintenance programs, very few basic, quanti-

tative, or conceptual tools are available in the social services. In VR one can do some cost-benefit analysis, and some cost-effectiveness work can be done on selected services such as homemakers or foster care. But basic problems on output identification have barely been addressed, much less solved. We do not even have an accepted, tested way of sorting out serious presenting problems from less serious ones.

That data do not exist by which good analyses can be completed in a timely fashion is obvious. Basic population data are not useful, since key objective variables associated with service needs have never been identified satisfactorily. One might examine the organization of social services and raise questions about why they are usually in the public or nonprofit sector, what barriers there are to entry by the profit sector, what the absence of a market mechanism does to efficiency, effectiveness, and so on. With Title XX opening up the process of social services resource allocation, these questions become more important. One might expect more pressure from the profit sector to be a part of social services. Given the growing proportion of the social service budget going to "services" the market can supply--food, transportation, homemakers, etc.--one begins to wonder about the long absence of the market as a target for social work research. As the concept of fees and partpayments seems to be developing, the approach of supplier incentives seems to warrant full exploration. Yet few have written on what should be looked for and what approaches may be most fruitful.

From the legal perspective, the major issue is the amount of discretion afforded administrators in social services. If one views social workers as public agents of the government, persons bound by constitutional requirements for due process and equal protection, the traditional claims of professionalism confront a growing body of legal challenges, since what we call professional discretion may be no more than an excuse for capricious, perhaps lawless, behavior by agents of the government. We are not so far from midnight raids and suitable home requirements. In foster care our bouncing kids from home to home is being fought in court. In adoptions, challenges to rules requiring tests for infertility, age, and marital status are in the offing. We simply must know more about how to design programs that resolve the tensions between citizen protection and professional discretion.

We do know a little about the incentive structure of the programs with which these citizens interact--if the benefits are valuable, do they induce people to behave in ways, perhaps undesirable ways, in order to gain the benefits? We have heard of questions of work effort, fertility, family formation, or dissolution related to cash transfers. Who has addressed these questions in services? It is in this programmatic context that I offer a list of priority areas for social work research. In my view, work in these areas would advance our knowledge significantly and give

policymakers and practitioners alike something to work with and from. Since this list is one I also offered the Social and Rehabilation Services, I can at least be accused of consistency.

Priority Areas for Attention

Program Management

Title XX brings several new dimensions to the manner in which social services have been administered in the past. It appears that Title XX has raised significant responsibilities in planning, and has raised many of the states to their allocation maximum. This has forced managers to grapple with making significant trade-off choices, but with inadequate information on need, effectiveness, and efficiency, and appears to be inducing further contracting for services, due in some measure to the increase in third-party funding.

Other social welfare programs such as child welfare, aging, and so on require considerable understanding of how organizations behave and are influenced, the way they affect professional as well as client response, and why management is so often criticized for lacking rationality in resource raising and allocation, information systems, and the like. Among the issue areas are planning, needs assessment, managing purchased services, and accountability.

Manpower

There continue to be questions about the use of manpower, the types of manpower, and the training necessary to qualify individuals for various positions. Increasingly, one sees forces afoot leading to a reduction in the proportion of direct providers who are social work MSWs, need for more managerial staff (contract monitors, evaluators, and planners), and greater use of paraprofessionals or "new" specialists and professionals such as day care providers, home health aides, and the like.

What is needed is an inventory of manpower needs and research into the various ways to meet those needs. Since we are unsure of the required manpower mix and skills, we are unsure of how to prepare for education programs, in-service training materials, and so on. We know little of the attractiveness of such positions and so cannot tell if incentives in the form of stipends and scholarships are required or if (unemployment and all things considered) the jobs and salaries are sufficient to attract persons already having the skills or who pay for their own training to qualify for the jobs. Analysis of the supply of social service manpower of all types and the incentives to get individuals into the jobs is warranted.

Defining Goals (or Objectives or an Analytic Structure), and Concomitant Measures

Social workers in general define goals in input terms and almost never grapple with the quantitative aspects of measuring achievement. Without outputs, no one has been able to define the relationship of inputs and technology to accomplishments, nor could alternative programs be compared on the basis of cost-effectiveness criteria.

With the five goals stated in the Title XX legislation come a large number of questions about the appropriateness of the goals, definition of the terms, critieria for goal accomplishment (or barrier removal), and so on. Such specification will assure that reports of activities leading to barrier removal and goal accomplishment will be based on consistent definitions. However, the knowledge needs exceed the requirement for definitional consistency. The issue of the relevance and comprehensiveness of the goals and operational measures are equally as important. Without such knowledge, eventual analysis of the effectiveness and efficiency of the programs in meeting social needs cannot be assessed rigorously. Required research would look into specification of output measures usable by local managers and measures useful by program analysis. Does one go bottom up (contracts with clients) or planner down (legislation and regulation) to define goal setting? Do the two threads meet anywhere?

Benefit and Effectiveness Measures

Possibly these could be developed quickly for parts of some programs, but only if global terms are avoided. One cannot assess "the effectiveness of social services," but one can ask about the effectiveness of specific services, such as homemakers, foster care, institutions, family planning, day care, and others, in meeting needs as related to the goals of the programs. Then when effectiveness is identified one can ask about effectiveness relative to costs (not only does it work, but if it works, is it worth the cost?) and whether alternatives may or may not be desirable. As states get to their Title XX ceiling and begin receiving more worthy requests than there are resources, some method of achieving resolution of competing demands must be accomplished. Resolution can be based on political clout, compromise and/or decisions based on analysis of what is or is not effective or beneficial, or on peculiarities of the funding formulas. Benefits, in this sense, accrue to individuals or to society and can be measured relative to costs. Effectiveness in this sense only means that the means accomplish what was prescribed. While costs can be compared, alternatives tend to look at efficiency in meeting the prescribed ends, whether they are beneficial or not. A state may develop effective means to close all of its insitutions, yet the closings may not leave the former inmates better off, nor might the costs for comparable levels

of care be less.

Some segments of social services have had considerable work defining costs and benefits for that sort of analysis. Homemakers and family planning are especially in the forefront. Other services have had almost no attention--housing services, for example. In order to provide managers, decision makers, and evaluators with the best tools for approaching trade-off decisions, projects to develop the necessary measures of benefits and effects should be undertaken.

Cost Data

Little cost analysis has been done. Since programmatic costs are unknown for given clients, true costs cannot be guessed at. No one knows, for example, what the full public cost is of an incapacitated AFDC father who gets vocational rehabilitation, social service, and Medicaid, much less the additional costs attributable to his family. Yet when one suggests a comprehensive services program, the first reaction is in terms of its visibly higher costs, even though these may be lower than costs now being incurred.

Social workers probably should consider other aspects of the public finance issues. Although social services do not account for large sums nationally, they have an impact politically and emotionally beyond their absolute amounts. The issues of substituting federal for state dollars under Medicaid or social services and shifting the incidence of tax from state to federal sources or vice versa come up often. Burden may shift from states to counties, as in California where state mental hospitals were being closed in favor of "community-based care." This shifts costs to county sources competing with a scarce property tax base for the county share of such programs as nursing homes, intermediate care facilities, welfare, social services, and developmental disabilities, not to mention water, sewers, roads, and schools. Such shifts may have serious implications for program efficiency, effectiveness, and allocations. In addition, I would suggest examination of the effects of donated funds and contracting on program operations, since such funds may skew services from the most poor to the more articulate segment of potential eligibles whom the nonprofit groups have traditionally served.

Questions such as the impact of social services on family splitting or illegitimacy have not been researched. The disincentives associated with fee schedules have not been examined. Participation rates and utilization patterns of social services as a function of income, prices, and availability are not known. Little is known about client perceptions of services and service workers and the relationship of these perceptions to utilization. We talk some about the problem of access, but just what this means or how to

remedy it - if it in fact exists - has not been researched. Without knowledge of behaviors one cannot assess the effects of alternative strategies for problem solving.

Social Service Demand

Traditional demand studies trace individual preferences over a range of costs to the individuals. When goods or services are free, for example, they may be used solely because the price is right. If the individual must pay something (fees, prices, time, inconvenience), his or her priorities for acquiring the service or good may change.

Use of vouchers in social services as a method of delivery, which varies from direct provision or local agency contracting, has been an intriguing possibility since it was first discussed by the Task Force on the Organization of Social Services. Funding was required in fiscal 1975 for the design phase of a demonstration project whose hypothesis is that social service clients can find their own providers and monitor quality. I do not know what has happened since. A second important use of vouchers would be in an experiment to measure demand for social services. This is a more complex design issue and requires considerable research. The research on demand for services and alternative approaches to delivery has barely scratched the surface.

Defining and Measuring Populations

When asked about the "universe" of potential users, social workers usually reply "all those in need," "all those with low income," "all of the dependent," or some such phrase. Many social service practitioners reject the notion of attempting to measure the numbers implied simply because it is obvious that the "unmet need" is so large that they simply need to expand the program. Very little is known about the size and characteristics of program target groups and how they change over time and how the programs influence those who actually end up receiving services. Refinements such as attempting to measure those eligible for some service or those who could use the service also are not made (e.g., How many of those eligible would benefit from the service and by how much?). Finally, the notion that the eligible population is fixed needs to be replaced by the notion that the eligible population is a function of the program's benefits and incentives. Such knowledge is required to develop forecasting capability and models of the supply and demand of services. Some forecasting perhaps can be done for relatively satisfactory short-term purposes by a series of exercises in regression analysis and curve fitting. However, the focus should be on knowing enough to be able to anticipate turning points, the effects of changes in policy, and so on. To do so requires at a minimum some assessment of the universe of potential eligibles and the manner in

which they change over time. Given these universes and how they change, one then needs to estimate their participation patterns. Finally, one needs to know the behavioral determinants of these patterns. An essential issue is when do people have problems into which government should intervene, at what point, and on whose initiative?

Since social service programs are largely operated by states and often locally administered, the range of administrative discretion, the lack of equity, and the variation in efficiency is very great. I worked on an article recently on the local agency in the welfare system, and one of the issues was whether local agencies are, as is often claimed, more responsive to local needs--defined not as response to political incumbents but to citizen problems. I could find no research on this issue, one which is at the heart of many arguments on behalf of fewer federal strings, and we do not know if it is true.

Much has yet to be learned about how the social service programs actually operate, the benefits they bestow, and their incentives. From the most global and conceptual point of view, we do not know much about the "services" aspects of "goods and services." We know less about that subset called "social services." Yet we need to have some notion of the economic dynamics of this industry in order to understand better the public role in supporting services. The problem of accountability in the social services and the role of public programs in the broad landscape of services should be explored. The relationship between various public social service programs, the private nonprofit philanthropic agencies, and profit organizations should be explored.

Title XX has brought new questions of the supply of services. Since we expect considerable contracting for services, we speculate the contracted services to be increasingly "hard"--child care, transportation, nutrition, and so on. The questions arise as to whether the public and the nonprofit, philanthropic organizations who now get the bulk of the contracts are the best suppliers of the services or whether the clients who get these services are those to whom the legislative intent was directed. We do not understand the following: (1) what purchase from nonprofit, traditional service agencies may indicate for who gets what services; (2) whether lack of a competitive market does, as the economists say, foster inefficiency and preserve the ineffective; (3) what effect tax-exampt status has on limiting entry to for-profit suppliers who may be more efficient and effective; and (4) what design considerations would be required in research, demonstrations, and/or experiments into incentives on the supply side. One does not need a Red Cross to provide transportation, for example. Whether incentives to provide it for, say, the elderly or handicapped by those who regularly provide it in the marketplace can be less costly and more effective has yet to be determined. Various for-profit ventures in provision of homemakers have apparently floundered

when competing with subsidized nonprofit or public vendors.

Further conceptual and demonstration work is required to develop necessary knowledge about the creation and/or development of services in rural areas and in other communities, primarily suburban, where full networks of services are unavailable. Many issues dominate in this area of concern. Title XX processes lead one to speculate that urban areas will garner an even larger proportion of the social service dollar since the change in statewideness requirements and greater responsiveness to clout and resources seem to put the less dense areas at a disadvantage. Yet there is little known about the relationship between distances, population density, and supply of services as they differ from urban areas.

Social Service Technology Development

Social service technology development has in the past focused primarily upon casework and group work methods. These are fundamental and key concerns and should be continued. Also required, however, is elaboration of additional technologies. In this regard, it would be desirable to explore alternative technologies for accomplishment of the goals of Title XX and for need meeting, barrier removal, and social problem solving. Many problems facing individuals are insoluble by established social service means. Other problems may be resolved through these means. The largest class of problems, needs, barriers--whatever they may be called--are probably soluble through a variety of means, some of which are within the current social service technology and some through other approaches.

For example, a number of the Title XX state plans indicate concern about juveniles in trouble. Whether reduction of juvenile offenses is best handled through present case or group methods, community action, manipulation of education or vocational opportunities, and so on is largely unknown. Use of hard technologies such as telecommunications for the homebound or for skill training for AFDC mothers has only begun to be explored. The technology of social services is not well-developed for the mentally retarded, learning disabled, deaf, and others with limited capacity for verbal interaction, especially with regard to information and referral, consumer knowledge, housing, and legal services.

Conclusion

What I have provided is no more than a menu with suggestions as to how some of the dishes are to be concocted. What is done it is now up to you, your tastes, your skills, and your vision. I will accept no hand wringing about the difficulties of raising research funds. In large measure, they are difficulties of your

own making. Unlike others in the full-time research business, you have your salary paid, a supply of free labor to help you, and often free computer time. Master and doctoral theses are developed every year and could be vastly upgraded, better targeted, and more vital. If no more than that were accomplished, a major advance in the cause of social work and social services would be made.

Nor will I issue clarion calls. Kahn did that in 1954, with unfortunately prophetic results:

> social work in the coming years either must formulate and test its own knowledge on a substantial scale, supplementing it with critical use of social science knowledge, or it must surrender its professional functions to new and more rigorous disciplines, thereby assigning its practitioners to the role of useful technicians and abandoning the hope of attaining full professional status for the field. These two possibilities have been recognized but the time of choice has now arrived.[10]

In the interim since that call, we have seen the profession grow and even out. And there may be a decline. We have seen allied fields spring up to compete: gerontology and rehabiliation, for example. We have seen professional social workers displaced from positions of authority in the programs long associated with social work, only recently to return, in what hopefully will be a long-term trend. As I see it, our survival as a viable profession requires substantially greater knowledge than we now have about what to do, what good it does, what it costs, and why it is needed. I hope we as a profession can accept this challenge and get on with the tasks it requires.

NOTES

1. Paul Leedy, Practical Research Planning and Design (New York: MacMillan Publishing Co., 1974), p. 4.

2. Alvin W. Gouldner, Wildcat Strike (Kent State, Ohio: Kent State University Press, 1954).

3. Scott Briar, "Effective Social Work Intervention in Direct Practice: Implications for Education" (Paper presented at the 19th Annual Program Meeting of the Council on Social Work Education, San Francisco, February 26, 1973), p. 17.

4. Ibid, p. 18.

5. Many thanks to Patricia Barry, of my staff, for doing this review.

6. M. Taber and I. Shapiro, "Social Work and Its Knowledge Base: A Content Analysis of the Periodical Literature," Social Work, Vol. 10 (October 1965), pp. 100-106. Strictly speaking, the methods of count and analysis are different enough that no strong conclusions should be drawn. They actually read a sample of 120 articles. We have, however, tried to use comparable definitions although I think their definition of "empirical" to be overly generous to the content of the publications.

7. W. A. Wallis and H. Roberts, Statistics: A New Approach (Glencoe, Ill.: Free Press, 1956), p. 5.

8. C. Shottland et al., Training for Social Services in Public Welfare Agencies and the Role of Institutions of Higher Education (Waltham, Mass.: Brandeis University, 1977).

9. Mary E. MacDonald, "Social Work Research: A Perspective," in Norman A. Polansky, Social Work Research (Chicago: University of Chicago Press, 1960).

10. A. J. Kahn, "The Nature of Social Work Knowledge," in New Directions in Social Work, ed. C. Kasius (New York: Harper, 1954).

IDENTIFYING RESEARCH PRIORITIES IN SOCIAL WORK EDUCATION

by David M. Austin

Background - An Historical Perspective

The topic assigned for this paper, "Research Priorities in Social Work Education," immediately raises a number of questions. Is the real issue research about social work education, the place of research in social work education, or the research agenda of social work academic researchers? Or is the question what kind of research will generate financial support for doctoral dissertations? Or perhaps the issue is what societal problems social work researchers, both academic and nonacademic, should be working on. If one looks at current literature in social work or reflects on the content of recent conferences, it is evident that there is no general agreement about which question should be addressed, much less about the answers to any of them.

In a preliminary exploration of these issues, I wrote to a number of social work researchers asking for comments. The answers I received indicated a general sense of disquiet and doubt about many aspects of research activities in social work education, both substantive research activities and research education. As I considered these comments which raised serious questions about the relevance of current research activities to social work practice and education, I found myself looking back at the history of social work/research relationships and at the paradoxes in that relationship. As I was beginning to formulate some initial ideas about this historial background, I had the fortunate experience of picking up the copy of Sidney Zimbalist's book, Historic Themes and Landmarks in Social Welfare Research. His overview of the issues in the historical relationship of research to social work highlights some of the difficulties involved in addressing the issue of current priorities in research.

> Social work in this country has had a long and ambivalent relationship with research going back to the very beginning of social welfare over 100 years ago. It may come as a surprise today to many social workers--and social scientists--to learn that the earliest predecessor of the organization now known as the National Conference on Social Welfare first met as a section of the American Social Science Association (ASSA).
>
> But the social sciences of that day differed in many respects

> from those of today. Then the American Social Science Association embraced essentially the same pragmatic goals of social reform and rehabilitation that social work has traditionally stood for. The prevailing cultural climate was one of eager emancipation from the religious dogma and mysticism that had long obstructed the objective study of society and human problems, and an unbounded faith in the application of rational intelligence--and its keenest instrument the scientific method--to the solution to the mounting social ills of the time. Thus for a brief period a century ago, social work and social science stood together at the brink of what was optimistically hoped to be the dawn of a new era of scientific enlightenment in the logical solution of social problems.[1]

As Zimbalist indicates, the institutional development of social welfare and the beginnings of the systematic practice of social work as a profession came at a critical juncture in American intellectual history when science was exploding and when social science had emerged to take its place beside the natural sciences as an intellectual activity. The implicit, and often explicit, promise of the social scientists in the latter years of the 19th century and the first two decades of the 20th century was that social science would be to social problems what physics and chemistry were to industry and what the biological sciences were to public health.[2] The tenets of scientific charity and scientific philanthropy were espoused by both social scientists and by the leading social welfare statesmen at the turn of the century and were taken seriously by public institutions, including universities and newly formed philanthropic foundations such as the Russell Sage Foundation. The interest in the practical application of science, embodied in such educational institutions as the Massachusetts Institute of Technology and other technical universities being established by wealthy businessmen across the country was reflected in social welfare in the choice of the name of School of Applied Social Sciences for the school of social work established in 1918 at Western Reserve University.

Implied in this early vision of the role of the social sciences was that they too were systematic sciences, capable of developing a cumulative and integrated body of knowledge verified through experimentation and multiple observations of natural phenomena. They were sciences that dealt with fixed and dependable entities that would open themselves to scientific investigation and the development of agreed-upon principles and concepts in the same sense that the physicists and chemists had been able to probe further and further into the realities of matter and energy, each scientist building on the tested discoveries of earlier researchers. According to this view, social science knowledge would provide the basic understandings required for public policy and public action in the social realm. The inability of social science to fulfill the grandiose expectations of development as a science put forth at the turn of the century is one aspect of the social work/research paradox.

The early juncture of social welfare and social science also

involved serious disagreements about the appropriate relationship between the methods of social science and the methods of social work. A split between the "pure" social scientists and those involved in the day-to-day activities of social welfare came as early as 1878 when the Wisconsin Delegation to the Conference of Boards of Public Charities (the first name of the Conference of Charities and Corrections) refused to attend the sessions so long as it met as a "section of social economy" of the American Social Science Association. The delegation explained its refusal on the basis that the meetings of the section were taking on the nature of a scientific association rather than a conference of professional practitioners consulting on common concerns. As Zimbalist points out:

> The significance of this very youthful flirtation and parting of the ways for the future of social work research is great indeed. The underlying conflict waxes and wanes in succeeding years but enters to some degree into every relationship between social work and research. The tension between objectivity and commitment, between tentativeness and confident action, between theory building and theory using, which is no doubt necessarily healthy in the practice of most professions, becomes heightened and sharpened when a largely unscientific art is placed against a research framework. By virtue of this early division of field social work was largely stripped of scientific skills and manpower and cut off from formal connection with the major sources of theoretical social thought of that era.[3]

Some of these tensions in the relationship between the doers and the researchers was reflected in conflicts over the potential affiliation of the New York School of Social Philanthropy in its early years with Columbia University[4] and conflicts in the early 1920s within the faculty of the Chicago School of Social Work involving its founder and the Abbott sisters.[5] Part of this conflict over the relation between social welfare work and objective social science research was the issue of the moral base of social welfare and of social work practice. There are actually a number of moral imperatives in the early beginnings of social work. The earliest beginnings of social work to a large degree were rooted in the moral imperatives of religion, imperatives exemplified, for example, by the lifelong dedication of Dorothea Dix in the mid 1800s to freeing the handicapped and mentally ill from the almshouses. Tied to this humanitarian morality in a number of religious traditions was the morality of evangelism. The home missionary movement in Protestant denominations in the United States developed at much the same time and often parallel to the early development of social welfare.

There was also another type of moral imperative that can be described as the morality of capitalism, which motivated business leaders to address themselves to the social evils of pauperism and crime as social conditions which threatened to undermine the stability of society and the effectiveness of the American economic system.[6]

This morality of capitalism was joined in the early social welfare movement by the civic morality of many of the early reformers, working to improve the quality of community life through reforms in public health, in child welfare, in local government, in business regulation, and in other fields.

To the extent that each of these bases of moral imperative or moral commitment were felt to be an essential, if not in fact a sufficient base for social work practice, the commitment to objective social science as a basis for policy and for action in the early years of social work as a profession was substantially weakened. The paradox of simultaneously proclaiming a commitment to scientific knowledge and to moral imperatives as the basis of action has never been resolved in social work, and indeed becomes a significant factor in answering the question, "What priorities for research?"

The complexity of this early set of relationships between social sciences that were assumed to have a formal system and a cumulative body of knowledge which they did not have, and social welfare/social work, which was at best ambivalent about its relation with social science, was further complicated in the early 1900s by the impact of the emerging discipline of scientific medicine. The juncture of two distinctly separate developments--the development of scientific medicine and the development of professional social work--has historically always been identified with the Abraham Flexner speech at the 1915 National Concerence of Social Work. Many other medicine/social work events were also going on, particularly in the largest cities where doctors often played key roles in the beginnings of social work education, but the Flexner speech highlights the paradoxes in those relationships.

In the early 1900s the field of medical practice was in the midst of what can probably be correctly called a paradigm shift. The work of Flexner in proposing a reorganization in the medical school curriculum at Johns Hopkins was a confirmation of the critical changes that in fact had already taken place in medical practice. These changes were forced on medical practice by developments in science. The theoretical supports had been destroyed for the older model of medical practice which was based on practitioner wisdom. Medical education earlier was largely an apprenticeship process, whether through the observation of the surgeon in the surgical amphitheater, through student participation in "grand rounds" in the hospital ward, or through the process of accompanying an experienced doctor in his day-to-day practice. The verification of the germ theory and other developments that flowed from this application of science had clearly demonstrated that scientific findings that ran contrary to "professional wisdom" in fact worked better when applied in medical practice. The process of paradigm shift takes place after bit by bit the intellectual supports for an existing paradigm have been chipped away by actual events, verified discoveries of science, etc. That had been taking place in medicine throughout the last half of the 19th century.

The function of the Flexner curriculum study in medicine was

to legitimate and institutionalize the model of a research science-based pattern of medical practice and in turn a science-based model of medical education. This has been enlarged and extended to the present so that entrance into medical school is dependent to a very large degree on demonstrating substantial knowledge in science, and specifically biology and chemistry. Pre-med students are expected to learn both the methods of biological and chemical research and a body of scientific concepts which are largely of one piece regardless of whether they are being taught in Texas or in Maine or in Florida or in Mexico or Scotland. Another aspect of the association of science and medical practice is the extensive association of biological and biochemistry researchers with medical schools to the point that the concept of the health sciences center as the framework for medical education is now widely accepted.

When Flexner made his speech to the leaders of social work in 1915, he expressed his judgement that social work was not a true profession, placing particular emphasis on the lack of a basic core of knowledge which would provide the central content of professional education. This core of knowledge, in Flexner's view, was to be derived from the systematic processes of the biological sciences. It would appear from the history of the profession of social work since that time that the social work leadership responded to Flexner's comments not as an analytic description of an existing situation but as a "put-down" intended to assign social work to a second-class status among the professions. Such a status was to be rejected by every means possible. The plan of action was to make social work fit the Flexner prescription.[7]

Largely ignored was the fact that developments in social work as a profession were at a completely different stage from those in the field of medicine. The paradigm shift which social welfare/social work was undergoing was the shift from an activity based almost entirely upon moral prescription to an activity based on systematic codification of practitioner wisdom. This was also a way of introducing rationality into social work practice but it was a different form of rationality than that being applied in the field of medicine. The conceptual principles that became the core of social work practice and education were not based on a systematic codification of scientific knowledge. Principles which constituted the core of the methods courses in the social work curriculum in the 1920s were the refinement of practitioner wisdom as taught by, or as embodied in textbooks, written by persons viewed as master practitioners. The use of case materials from the field was Mary Richmond's contribution to social work education, not the use of scientific methods in diagnosis.[8] Yet there was the vision that from this practitioner wisdom would emerge a set of practice concepts that would have the dependability and consistency that the principles of anatomy have in the practice of surgery or that the principles of microbiology have for dealing with contagious diseases.

All of the paradoxes are still with us. The social sciences are, with the possible exception of a limited number of very special-

ized fields, still largely a noncumulative, nonsystem building area of research science. The step-by-step investigation of cell structures, or of subatomic particles, or of the universe by the field of astronomy has few parallels in the study of human behavior. The history of social science is marked not by systematic theory building but by a successive series of competing schools of thought alternating between genetic perspectives and environmental perspectives. All of the social science research since the turn of the century has yet to result in a codified body of knowledge about individual behavior which is, in any real sense, universally accepted, and which could, therefore, serve as the framework for social work practice. Even less consensus exists in the area of group behavior and social organization.

Adding to the inherent complexity in the structure of social science knowledge is the increasing awareness that the basic elements of individual behavior and social organization, which are the object of social science research, are also subject to "relativity theory." That is, the definition of the object to be studied, as well as the measurement of the results of research, is affected by the social and philosophical position of the definer. An understanding of the meaning of the "social construction of reality" suggests that social science may always be involved in a series of debates about the basic definition of the object of investigation, making it literally impossible to achieve consensus on the comparability of research outcomes across cultures, or even within a single culture, particularly if the researchers are operating from different ethnic class and philosophical backgrounds.[9] Current issues around the operational definition of a "family" illustrate this dilemma.[10] What social science has provided are some systematic methods of investigation which can, in fact, be used by many different types of researchers for many different purposes, just as the methods of research in chemistry can be used in theoretical research in the laboratory and in quality control in industry.

The issue of the roles of science-based knowledge and of moral commitment in social work practice are no nearer resolution today than they were one hundred years ago. The form of moral imperative may be different but the issue is the same. Moral commitment today may mean identification with the political goals of specific ethnic organizations, identification with the principle of citizen participation, or moral commitments to such principles as the right of individuals to control their own bodies, or "the right to life." The question of whether scientific research or moral conviction is the most sound basis for action is still a largely unresolved issue in social work. The fact, to which I will speak again later, that there is no agreement about the correct criteria for measuring outcomes which might make it possible to make a clear-cut comparison between the results of using scientific knowledge or moral conviction as the basis for action, adds to the difficulty of resolving this conflict.

The continuing differences between the knowledge base of social work and the model of social work education, and the model of medical

education is reflected in the difference between the relatively highly prescribed preprofessional undergraduate educational track for medical students and the lack of systematic requirements for preprofessional preparation for social work. It is a further confirmation of these differences that the proposals for a more structured preprofessional undergraduate program and a more controlled access to graduate education point to an expansion of the role of undergraduate social work professional education rather than to a prescribed undergraduate program in the social sciences. And the key element in the expanded undergraduate social work curriculum is the expansion of the required hours in field practice. To the extent that there are expectations of undergraduate preparation in the social sciences, almost any combination of any set of topics in sociology, economics, political science, and/or psychology, taught from any of half a dozen different philosophical perspectives, can be viewed as meeting the undergraduate social science requirement. There is no assumption that there is a codified body of knowledge to be taught consistently about the family, about poverty, about communities, or even about individual growth and development. Theories of human development as now taught depend, at a minimum, upon the social science discipline that one chooses and more particularly on the professor and textbook that are in vogue in a particular college. In the social sciences used as a prerequisite for social work, in comparison to most of the biological sciences, there is no explicit expectation that what is taught as social science is, in fact, rooted in tested and verified research which is cumulative in its results. Moreover, there is no expectation that students will repeat prior experiments in their research education as is expected in the biology lab, constantly adding to the process of verification. This is not a fault of social scientists, only evidence of the limitations of social science as a base for social work education.

The issue is not whether the medical education model with its relation to a biological/chemistry science base is the only sound basis for professional education. The fact is that other professions have developed along very different lines. The legal profession is not based upon a scientific model and it has made little use of scientific research. The core knowledge of lawyers consists essentially of the codification of practitioner wisdom and a knowledge of the history of the outputs of political systems. The practitioner wisdom is codified in the precedents resulting from the decision of judges; the political outputs consist of specific legislative acts. Neither source of knowledge is based on science and frequently what is in law is flatly contradicted in the findings of scientific research. The profession of education, while encompassing a great deal of research activity, is also not based in any substantial way on an agreed upon and codified body of scientific knowledge about learning.

Even the models of graduate education within the professions vary widely. As the President of Harvard observed in a recent annual report on the state of the university, there are widely different models within a single university. There are graduate profes-

sional schools that are composed almost entirely of social scientists investigating issues within the professional domain. The graduates of these schools are primarily researchers. At Harvard, this includes the School of Public Health and the School of Education. There are schools largely based upon senior practitioners teaching practitioner wisdom. At Harvard this includes such schools as architecture and urban design and law which produce professional practitioners and teachers of practice. Then there is the massive school of medicine which encompasses major elements of both practitioner education and education for scientific researchers dealing with practice. All of these models of professional education are viable. They all enjoy a substantial degree of public support. However, the "medical model" which has been a source of controversy and confusion in much of social work practice also has continued to be the most important factor in the aspirations of social work education, regardless of the significantly different structure of professional knowledge in the two professions.

To summarize this historical perspective, the issue of priorities for research in social work education is substantially affected by the fact that the social science domains with which social work has had the greatest interaction still largely consist of an uncodified and unsystematic body of specific research findings and deductive theorizing. The original aspirations of developing prescriptive knowledge based on verified findings from systematic research have been largely unfulfilled. Uncertainty about the proper relation between moral commitment and scientific knowledge as a basis for action in social work still persists. The official attitude toward research, however, as reflected in the official pronouncements of social work, has often reflected an effort to imitate the model of applying science to a profession which was developed for another profession, medicine, a model which was inappropriate for social work at the turn of the century and still is today.

The Contemporary Scene

Taking a contemporary view of social work, there are a number of characteristics that make it particularly difficult to fit it to the model of a research-focused, science-based practice. First, social work is not based on a single modality of practice or a single intervention method. Again, other professions have other models. Lawyers are educated almost entirely for a specific type of activity constituting the study of legal precedents and the use of those precedents in a conflict, or a bargaining process leading to conflict resolution. A single model of professional-client relationship dominates the profession. The fact that lawyers also become policy analysts, business consultants, tax advisors, business executives or public administrators is largely a matter of indifference in the model of legal education. Doctors are educated basically as diagnosticians, not as therapeutic counselors, not as medical witnesses in court, and not as health program administrators. The study of health policy is not a core

part of medical education but a specialized topic added to the preparation of an MD.

Social work however, because of historical events which brought together a mixture of practice activities into a single academic unit within the university, has been defined for several decades as constituting a cluster of distinctly different practice activities consisting at a minimum of the triumvirate of casework, groupwork and community organization. Each of these practice modalities, perhaps for political reasons as much as for rational reasons, has been given official coequal status in social work. Each of these practice modalities has traditionally been linked to distinctively different sets of social science concepts. These social science concepts, which have been described as providing a "rational" base for social work, are frequently contradictory. Intellectually this creates serious difficulties when the several practice methods are combined into a "generalist" model. The fact that there has not been more difficulty with the generalist model is further testimony to the fact that social work practice is not, in fact, science-based. That is to say, social work practitioners using different practice methods can do equally well whether they bring to their work knowledge of the basic theoretical principles of child development, the principles of role relationships in small groups, the dynamic principles of Freudian psychology, the economic model of society based on the individual operating as a rational economizer, or the principles of social ecology.

A second source of current difficulty in the effort to apply science on a prescriptive basis to the practice of social work is the interactive nature of social work interventions; that is, that the outcomes of social work are coproduced. This makes the nature of social work practice situation-specific to a very high degree. The content of practice activities--whether they be the activities of the social planner, the group worker working with a group of preadolescent boys, or the family counselor--is a result, not just of the actions or the decisions of the professional practitioner, but of the interactional processes between the professional practitioner and the other persons in the situation. In medicine, for example, a kidney is a kidney is a kidney to a very substantial degree, in rural and urban situations, in Russia, Indochina, or the United States. The prescription of a given drug, or the carrying out of a specific surgical operation can be expected to have roughly similar results under all these different circumstances or at least the probabilities of a particular range of outcomes is known. Moreover, the results from the use of a particular drug, or more particularly the outcome of a given surgical procedure is, to a high degree, though not totally, independent of the voluntary cooperation of the kidney or even of the patient. While the problem of patient compliance in the use of prescriptions is not an unimportant issue, to a large degree medical practice does not depend upon controlling the interactional processes between doctor and patient in order to carry out its interventions. Variations in these interactional processes are not a significant factor in medical research, although they do affect major aspects of public health research.

In social work, voluntary involvement and participation of the other participants in the intervention process is essential. Social work teaches and believes in the principle of client determination. By definition, that means that the client is a participant, and a nonpredictable participant, in any practice activity. We add to client determination the principle of "starting where the client is"; another pragmatic statement of practice wisdom reflecting the understanding that where there is not genuine participation, whether in a counseling process, an activity group, in a planning committee, or even in a parole interview, there is in fact no opportunity for successful professional practice.

The social work situation requires that if there is to be a truly scientific base for practice, the underlying concepts must apply not only to broad classes of events such as episodes of counseling with husbands and wives, but must be able to be applied systematically to an almost infinite number of different situations involving specific combinations of client, worker, and situational and interactional characteristics. It is not surprising that there has been a lack of cumulative knowledge development. Nor is it surprising that the outcomes of research studies dealing with social work practice have largely resulted in "no-impact" findings. Moreover, the nature of the interface between scientific research that begins with a null hypothesis assumption (a fact doesn't exist unless it is verified) and social work practice is such that the no-impact results are the ones that can be most convincingly generalized, while any positive impact findings cannot be generalized convincingly beyond the very explicit combination of worker, client, setting, and interaction mode existing in a particular situation under study.

Pragmatic confirmation of the perspective that social work practice is not science-based is reflected in two characteristics of the social work education scene. First, there is the frequent comment by students or graduates who are queried about their professional education that it is the field practice experience which is most useful, not the research courses or the social science content. Second, there is the fact that through all of the years since the formation of the first association of social work educators in the early 1920s, the most consistent and stable requirement for recognition as a school of social work has been the curriculum provision that up to 50 percent of the student's time be used in field practice. With nearly all other aspects of the curriculum of any particular school now open to justification based on the educational rationale of the individual school, the field practice requirement is still the most explicit stipulation for accreditation.

In summary, it can be said that in the 60 plus years since the Flexner speech in 1915, there has been little progress in developing a clearly identifiable science-based model of practice concepts. The legitimation of the social work profession has never depended upon its conceptual base. Social utility has been the major source of legitimation. It is recognized that for those within the profession who are particularly concerned with defining an exclusive domain for social work with a unique core of knowledge, such legit-

imation is not sufficient. But the domain of social work has, in fact, continued to expand throughout the 20th century without a scientific base. However, a conclusion that social work has not, and probably will not be a science-based profession in the foreseeable future, does have implications for the role of research and research priorities.

Social Work Education, Research, and the University

While the foregoing comments suggest that at this time there is no pervasive demand from either professional practitioners or from program administrators for the extensive pattern of research activity that would be required to create a truly science-based model of practice, the development of research activities within social work education has been responsive to a different set of dynamics.

In the United States social work education has become totally enmeshed in the organizational system of higher education, in contrast to the situation in a number of European countries. In the United States, higher education at the university graduate school level has been dominated since the beginning of the century by the German scientific research model. Johns Hopkins University, the site of Abraham Flexner's medical school curriculum study, is credited with having been the pacesetter in the introduction of the German research-oriented model for graduate education into the United States. The science/research-based university is quite different from the English model of a university that is based ultimately on a study of the classics and the humanities with "gentlemen" as students. Neither of these models gives priority to the professional school with its emphasis on the preparation of practitioner specialists, although in the United States all universities have professional schools, and probably depend heavily on them for financial survival. The conflicts between the resource requirements of the terminal degree master's professional programs and those of the research-oriented PhD programs are a constant issue in every university. However, in the ecology of most universities it is clear that the science research-based PhD program model is the dominant model in establishing university objectives and criteria for judging students and faculty, although medical schools may dominate the politics of resource allocation in some universities.

The full impact of the university relationship on schools of social work only began to be felt in the 1950s. Prior to that time, faculty members in schools of social work were largely women coming to the university from a practice career and having, at most, a professional degree in social work, or sometimes male faculty from a related academic discipline. Until the 1950s, many schools of social work could be said to have been in the university, but not of the university. In some instances, the social work program was one of a few graduate programs involving "women's professions" grafted on to a women's college. In other instances the school of social work had been forced on the university by pressures from external interest groups, including social work practitioners, social

welfare agencies, and public officials. The school of social work was one of the few niches in the predominately male chauvinistic world of the university where women could achieve the status of faculty members. However, as individuals without a PhD taught in a professional program that did not offer a PhD degree, faculty member status was marginal at best from the point of view of many of the other members of the university faculty.

In the 1950s and 1960s there was the beginning of a substantial effort to upgrade the status of the school of social work within the university. In some instances this was an issue of survival, as for example at Western Reserve University where President Millis in the early 1950s proposed the closure of the school on the grounds that it was not a graduate-level academic program, but essentially an apprenticeship program. One way to upgrade the status of a school was to increase the number of faculty with a PhD degree. This began a process which is only now beginning to have its full impact.

The process had several steps. In the first step, a number of existing faculty members sought PhD degrees, either from social science departments or from one of the few early social work schools to establish a PhD program. Also, a number of refugees from Europe with social work experience and advanced academic credentials became members of social work faculties. Peer status considerations began to add to the pressure on other faculty members to acquire a PhD.

The second step was the initiation of doctoral programs in a larger number of the "senior" schools of social work and an increase in the number of doctoral students. The newly established doctoral programs had one distinct difference from the existing social work professional degree programs. Professional degree programs, particularly since the early 1950s, had emphasized in their curriculum structure the importance of knowledge about research methods. But they did not require to any substantial degree, the demonstration of advanced research competence by individual students through independent research. Many of the schools that did have a formal research-oriented master's thesis shifted in the 1950s and 1960s to group research projects that did not test the skill of the individual members of the group in research design, data gathering, and analysis. Other alternatives have been developed since that avoid the issue of testing graduates of the MSW professional program on the extent of their individual research competence.

The doctoral program, however, in nearly every university requires that the student demonstrate substantial competence in research through course work and the dissertation. Moreover, most universities require the inclusion of individuals from outside the school of social work on a dissertation committee. This is intended, in part, as a method for enforcing the general criteria accepted in the university for defining competence in research practice.

The third step in this process, which flowed naturally from the first two, has been an increasing emphasis within schools of

social work and within universities on research and publication as the primary basis of granting tenure to faculty, rather than professional practice competence. Although the term "scholarly activities" and the implications of "publish or perish" can be interpreted to cover a broader range of activities than those that are technically defined as scientific research, there also is the reality that tenure decisions at a university-wide level, depending on the particular university, are likely to be strongly influenced by the arts and sciences research and publication tradition from which many key university administrators come.[11] As tenure opportunities become more scarce, the emphasis on these criteria is likely to increase. Although the interpretations of what constitutes research may vary from university to university, in very few instances are university administrators proceeding on the assumption that demonstrated professional competence joined with teaching competence is identical to and can be wholly substituted for evidence of independent research and in turn publication in recognized journals. Thus the priority in faculty recruitment is on relatively younger persons with demonstrated capability in research and publication, even though they may have limited professional experience and no significant evidence of being a "master" practitioner. If there are master practitioners on social work faculties in the future they are likely to be in field teaching positions without full faculty status.

Thus as a result largely of the "system effects" flowing out of the relationship of social work education to the university, research that is based ultimately on a formal scientific model has become an essential and central element in social work education, particularly in schools with a doctoral program. Individually, many of these research activities are competently carried out and the random publication of the results in a variety of journals is consistent with the traditions of other academic fields. However, there is no cumulative contribution to the development of an organized body of knowledge for social work and the translation of research results into specific guides for practice is an erratic process, at best, under current procedures.

Since the operational paradigm for social work practice has not made a comparable shift, it is not surprising that tensions emerge between schools and hiring agencies, or that the National Association of Social Workers has been lobbying so hard for "practice" representation on accreditation teams. It also is not surprising to find research faculty members complaining that research is not a significant factor in master's degree curriculum design and that many senior faculty do little in the way of ongoing research after achieving tenure. Once the hurdles of dissertation and tenure are overcome, there are likely to be few rewards or significant resources within the school or practice community for a continuing investment of time in research, except for those "driven" researchers with an obsessive sense of curiosity.

A number of heuristic indicators can be cited to support the argument advanced so far about the research/practice relationship and the research/social work education relationship.

1. The majority of social work research studies that are currently reported in the form of books and journal articles consist of doctoral dissertations, sometimes not even slightly rewritten.

2. A second major source of research reports, as reflected in presentations at the meetings of the Council on Social Work Education, are assistant professors who must demonstrate some form of collegial scholarly recognition to establish even the most elemental claim to tenure, regardless of their abilities as teachers or as master practitioners. Neither of these latter skills, for example, can be demonstrated at a CSWE program meeting.

3. Tenured professors who are doing long-term research of significance to the field of social work practice probably can be counted on the fingers of two hands. There are a small cluster of names known to those interested in research who have been relatively long-term faculty members and who are identified as master practitioners in social work research. The process of adding additional names to that roster over the last ten years has been, at best, very slow.

4. The demand from the practice field for research has been so weak that not until 1977--62 years after the 1915 National Conference--were two specialized journals dealing with social work research reports established. It may even turn out that this development does not mean a shift in the interests of the field or an increased commitment by social work educators to the importance of the research function. It may be primarily another response to the university "publish or perish" syndrome, providing increased publication outlets for assistant professors.

5. The articles in those journals that traditionally have been identified as the professional journals of social work are a mixture of research articles, articles based upon practitioner wisdom, theories, descriptive reports of practitioner experience, and a variety of advocacy articles. All of these may have important reader audiences. The criteria for publication selection in these traditional journals has never been based upon research science criteria, nor has there ever been any serious suggestion that these should be the primary criteria.

6. One of the strongly advocated proposals for curriculum change is that of the "clinical" doctorate. The key distinction in the "clinical" doctorate is that it does not put the same emphasis on the demonstration of significant research competence. The proposal for a clinical doctorate is essentially an effort to change the label on

the terminal professional degree without the hurdle of a research dissertation.

7. A pragmatic test of the real priorities in social work practice is the informal ranking process applied to field placement positions by graduate students. It never has been suggested that the level of research competence available among the professional staff in a particular agency is the significant factor in the status ranking assigned by students to field placement opportunities.

8. Even in the 1960s, which produced the image of the social scientist as the reformer who was designing large-scale social experiments, the emphasis was on innovation rather than on controlled quasi-experiments. Change advocates both within and outside social work placed greater faith in innovations shaped by inspiration and community consensus than in systematic analysis based on formal social science.

The preceding analysis of the divergent developments in the social work practice/research relationships and the social work education/research relationships provides a background for the effort to set forth a realistic framework of priorities for research in the immediate future. Such priorities should not be shaped primarily by academic career needs, although these needs cannot be ignored. Nor should the priorities be determined by the institutional interests of the organized profession, although these too cannot be ignored.

And Now

What conclusions can be drawn from the preceding analysis that are relevant to the issue of priorities for research in social work education. The conclusions that I have drawn are as follows:

1. Social work, including all modalities of practice, is a profession based on organized practitioner wisdom, not on a body of scientific knowledge, similar to the situation of a number of the other human service professions. The relationship of research to social work practice and to social work education must be defined in a way that is relevant to this fact. The major function of research in social work is not theory building or theory testing in the scientific model. The major contribution of research to social work practice is to be made through the systematic study of practice.

2. The current relationship between social work practice and research is marked by a low level of effective demand for research on practice. Based on past and current experience, social work practice is, in fact, able to

proceed with its present mode of activities without an urgent need for research dealing with practice theories. There is no significant demand coming from the field to schools of social work for expansion of research content, either as part of curriculum or as a part of the activities of faculty members. There is also no organized effort from the profession to generate expanded funding for research in the university. Where there is a demand for substantive research on policy issues relevant to social work, like research on income maintenance, the funds are being directed to policy research and public policy academic programs outside of schools of social work.

3. The current relationsip between the professional school of social work and the university is marked by a very active demand from the university for research activities, a demand that particularly affects doctoral students and assistant professors. This demand also tends to draw persons with a professional degree and a PhD and specialized research competence to the university, particularly when the school of social work has a doctoral program. This demand for research activities does generate active promotion of funding for research. However, the nature of the demand from the university also tends to create a gap between the priorities of the school of social work and social work practice priorities, encourages piecemeal, individualistic research rather than collaborative activities, and encourages random and fragmented publication at the expense of a systematic process of cumulative knowledge building.

4. The definition of priorities for social work research involving both social work practice research, and research on social work education is a distinctly different process than the definition of research priorities for the social and behavioral sciences, although there are common interests in the continued development of research methodologies. Moreover, there is little evidence of any systematic relationship between research activities in the social and behavioral sciences, both basic and applied, and the development of improved practice methods in social work.

5. Since social work is not a science-based profession, the model of the practitioner/scientific researcher as a career model (similar to the historical model of clinical psychology) is not a relevant guide. Similarly, since social work practice does not use research as a central practice activity, as does the discipline of public policy analysis, research competency is not a mandatory core element in social work education. Therefore, there needs to be a continuing distinction between the prep-

aration of most social work practitioners who, regardless of the level of intervention or type of method utilized, should be expected to: (1) draw on research findings where they are applicable from both social work research and the social and behavioral sciences, and (2) be able to use a variety of data gathering and data analysis procedures relevant to a particular social work intervention, depending on the organizational setting, and the preparation of persons for a specialized career in social work research. The preparation of social work researchers may be, in some instances, an appropriate curriculum focus at the master's degree level. It should be a major function for doctoral programs. Social science academic programs, as they now exist, should not be viewed as the primary source of social work research specialists, although the participation of social scientists with interests relevant to social work practice and education as members of social work faculties should be encouraged. However, it is not a primary function of social work education to provide an academic setting for social science researchers to pursue social science theory building research.

Priorities

The search for priorities for the future of research activities in social work education could be pursued on the basis of things as they are now. The preceding analysis, however, suggests that things as they are now in social work research are not in a very satisfactory state of affairs. Therefore, the following discussion of priorities deals first with priorities for the restructuring of the social work research effort and then with some thoughts about more explicit and substantive priorities within a reorganized framework for social work research.

The following is a set of proposals for the focusing of research efforts in social work and particularly that part of the research effort that is related to schools of social work. (This discussion is not intended to cover the range of programmatic, administrative, and policy research which perhaps can be best described as social welfare research.)

1. The first priority is to initiate processes to develop a nationwide social work research initiative with major leadership from career researchers in social work education. This nationwide research effort should address itself to a research agenda and to methods of involving social work researchers with a career interest in systematic research dealing with social work practice. The critical issues on this agenda should reflect the concerns of the society at large, not the career priorities of academia or the self-interest priorities of the profession.

2. The development of a nationwide research agenda should give primary attention, though not exclusive attention, to the development of a program of research directed toward the study of social work practice at micro, mezzo, and macro levels. That is, practice dealing with individuals and primary groups, practice dealing with organizations and communities, and social work practice in social policy.

3. The research agenda should be developed around a set of research issues directly relevant to persons at critical points of professional decision making, including direct service practitioners, program planners, administrators, and policy analysts.

4. The development of a nationwide research agenda should be linked to the development of a systematic model of communication among researchers and of dissemination of research results to practitioners and a model for the cumulative development of research-based knowledge around a limited number of research issues.

5. The development of a community of interest and a communication linkage system among researchers in social work to strengthen the processes of dissemination and of cumulative knowledge development should be extended to include career research specialists in practice settings, and researchers in professional schools in related human service areas, including public policy, public administration, community and regional planning, public health, educational psychology, nursing, clinical psychology, business administration, and so on.

6. The definition of research issues should include comparative studies of common issues in practice cutting across human service disciplines and common issues in professional education cutting across professional schools.

Within the broad set of developmental priorities suggested above, there are specific topics that can be identified as potential priority issues for social work research. This framework of priorities is not intended to cover all of the potentially important research topics in social work, nor is it intended to suggest that these should constitute an exclusive focus for social work research. There will, and should continue to be, a wide variety of activities, including a continuing and increased range of programmatic and administrative research carried out in conjunction with operating agencies, substantive research in social policy areas, and what may be identified as problem-identifying or needs-assessment research. However, the following discussion suggests that these research activities are not they key elements in a national agenda for research in schools of social work. The following topics are not listed in any absolute order of priority. They are intended to represent major thrusts that appear to the author to be the most

important for the development of research in social work education.

Research on the Impact of Social Work Practice

Public support for social work practice is apparently largely based on the "care-giving" or "advocacy" functions of social work with relatively limited attention to the actual outcomes accomplished by a variety of social work practice activities. However, the lack of systematic information about the nature of outcomes from social work practice and about the relation between social work interventions and outcomes raises serious problems of public policy as well as leaving the profession in an ultimately highly vulnerable position. If social work practice makes a difference in social opportunities and in the psychosocial development of individuals, in the functioning of groups and communities, and in the shaping of social policy, then it is essential that a high priority be given to research studies that clarify the nature of these impacts of social work interventions, that result in the improvement of methods for measuring impact, and that serve to differentiate between the impacts of various intervention methods. The pursuit of impact research is relevant to the level of direct services to individuals and primary groups, to the study of the impact of program units, to the study of the relationship between administrative and organizational structures, to the type of services provided, to the impact on ultimate consumers of service, and to the study of the impact of social policies. A focus on research on impact involves giving major attention to the refinement of impact measures, the development of a strategy for the use of similar impact measures in a variety of practice studies, the replication of impact studies in a variety of settings involving similar types of social work practice, and the study of the relation between service impacts on individuals and total program impacts on neighborhoods and communities.

An initial task in the development of a comprehensive strategy for the study of practice impact would be the systematic assessment of the full range of existing outcome studies dealing not only with social work practice but with related human service disciplines. The results of that assessment should be reviewed by a national panel of research and practice specialists.

It is not necessary here to point out all of the obvious difficulties involved in defining what is "mental health," what is meant by "improved family functioning," or by "a strengthened sense of community." These difficulties have existed for decades. However, unless we are prepared to accept a growing divergence between research and social work practice, these issues must be addressed.

Comparative Studies of Alternative Interventions

As Joel Fisher reports in his review of casework research studies,

most of the professional practice activity reported in these studies comes out of a common mold, primarily counseling interviews using assumptions growing out of Freudian psychological theory.[12] It is essential that there be comparative studies of social work intervention or social treatment methods that differ markedly from this model. This could include, for example, studies of the comparative impacts of professional social casework services as provided by a traditional social work agency, public or private; the provision of care primarily through a "marketplace" or voucher system with the service recipient free to choose among a variety of service entities; nontraditional methods, including meditation; and the use of biological treatments such as the use of megavitamins. These intervention methods represent important variations in the relation between professional and client, and between care giver and the person needing care, which may represent important personal options and should be examined as part of the search for public policy options for the achievement of broad social objectives.

Professional/Organizational Interface

A major issue in human service administration is that of the interface between administrative management systems and professional specialists. Large elements of personal frustration are currently involved for both managers and professional specialists, particularly in large human service organizations. Large amounts of time and money are being used trying to resolve issues growing out of this interface, resources that are, therefore, not available to use for direct services to individuals and primary groups. None of the currently existing models, including the hierarchical management system used in most private businesses or the small collegial work group model drawn from the small scale nonprofit social work agency are really relevant to the present situation. The present situation leads to large gaps between professional goals and actual results as well as between stated organizational objectives and the actual nature of organizational outcomes. Social education has not dealt with these issues and graduates of professional schools are ill-prepared for the realities of the work situation that many will enter. The dynamics of the existing situation in human service agencies are little understood and the possible consequences of alternative organizational models on the actual provision of services to the public is even less understood. Studies of the impact of organizational systems on service activities and program outcomes are urgently needed.

Policy Research - Family Impact

At the social policy intervention level, the central issue at this point is the question of the impact of social policies on family formation, family structure, and family maintenance. The family continues to be the most universal, and probably the most significant primary group relationship for all human beings. Many of the changes brought about under the label of the welfare state,

or through "liberal" social policies, have had major consequences for the family as a natural care network. Most of these family impacts have been unintended effects of social policies designed to increase individual options, to reduce poverty, to equalize access to opportunity, particularly as between men and women, and so on. Social work often is called on to deal with these "unintended effects."

Provision of professional social work services to individuals also has a variety of impacts on families that have never been studied systematically. Since social work continues to include in its ideology unresolved ambiguities about the value of individual self-expression and the importance of the family, it is not surprising that little attention has been given to the impact of services on a group of families. Similarly, there is need for systematic attention to research on the impact of major social welfare policy interventions in income maintenance, in health provision, and housing provision on the structure and process of primary neighborhoods and small communities. There also is a need for studies of the differential impact of such policies on various ethnic populations because of differences among them in age structure, residential location, occupational patterns, family structures, and so on.

Education Impact

To the extent that the issue represented in the title of this paper is intended to include the issue of priorities in the study of social work education, it is consistent to suggest that the priority area of attention in educational research is the study of education impact. This involves the issue of research on the comparative impact of such subelements in the social work curriculum as classroom courses and field teaching. There also is a need for comparative studies of the impact of agency work experience and staff development training as compared to formal professional education. Current developments are pointing strongly to the need to study in-depth the differences in results accomplished through an undergraduate social work program, through an undergraduate liberal arts program, and through "on-the-job" training.

Natural Care Networks

Among substantive areas for research, as distinct from the areas noted above that are primarily basic studies of the relationship between social work practice and impact, this author would propose giving serious attention to the study of natural care systems, those primary social relationships through which most people most of the time deal with personal stresses and crises, at all income levels. This would include studies of similarities and differences among different types of substitute natural care networks, including such things as "fellow sufferer" groups, provision of nonprofessional support and care services that are not intended to be "treatment" services, the provision of financial

subsidies, and so on. The provision of specific financial subsidies, similar to the proposed subsidies for adoption, is one way to create or maintain essential natural care networks. This focus for social work practice might come closer to a model of primary prevention than the models of total social and political change, models that have lost some of their credibility since the rhetorical days of the 1960s.

Crosscultural Analysis

While substantial attention has been devoted to drawing on content from the social sciences intended to increase cultural understanding of practitioners who may be involved in crosscultural practice situations, little attention has been given to the actual impact of different cultural frameworks on the nature of social work practice. Since the general psychological framework that traditionally has been the basis of most social work practice has been acultural, the issue of studying cultural variations in practice conditions has been considered at various times either a form of stereotyping or as an issue of faith related to the defense of distinctive cultural traditions against the impact of cultural assimilation. Ideology often has determined whether individuals have taken a position that there are no differences among different cultural groups or that the social patterns in a particular ethnic group are totally unique and distinctive under all conditions.

If social work is to move toward a truly multicultural practice framework, then it is essential that attention be given to understanding cultural factors in social organizations beyond the level of sensitizing workers to the fact that there are cultural differences. In many situations, social work services have been a major factor in cultural assimilation. The preservation of distinctive cultural traditions will require a substantial understanding of the real differences in family and community patterns, and an understanding of what is necessary to protect these differences under the impact of urbanization. Even more complex is the process involved in developing professional social workers who are prepared to practice, and to be accepted in multicultural settings, and who can go beyond the issues of ethnic separateness without denying the realities of the complexities of professional functions in a truly multicultural society.

Again, there is a need for a series of studies dealing with professional social work practice in different cultural settings and of the experience of social work practitioners practicing within cultural groups, and across cultural boundaries. An initial round of studies has concentrated largely on demonstrating the deficiencies, both quantitatively and qualitatively, in services provided to groups traditionally defined as ethnic minorities. Attention now needs to be directed to the characteristics of an effective pattern of true multicultural professional practice.

Priorities in Education for Social Work Research

Sticking to the general theme that a new linkage and a sense of relevance need to be established between research activities in schools of social work and the field of social work practice, this author would propose that the priority in the research component in general social work education be given to what Robert Mayer and Ernest Greenwood identify as policy oriented research; that is, the methods of empirical research that are relevant for the examination of propositions about the relations between social work interventions and their outcomes. This would include the methods of research used in needs assessment, program design, program selection, program evaluation, program monitoring, and so on. It could include, but not as the central thrust, attention to the issues of experimental science. This implies that the research component would be related to research, and that data gathering and data analysis methods would be used by social workers at all levels of practice.

Conclusion

We are at a point of some critical decision making. The initial analysis suggests that it is quite possible to proceed in a pattern which perpetuates a style of essentially piecemeal research studies in social welfare programs for planning and administrative purposes and an essentially separate program of research in the university organized around the requirements of doctoral programs. In the worst of all worlds, under pressures from the field and the steady expansion of doctoral programs, the research component in the doctoral program and the dissertation could go through the same cycle as the research requirement and master's thesis went through in the 1950s and 1960s, when they became first an entry-level experience in learning about research, and ultimately a ritualization required by the university. Such a development, however, is likely to have disastrous consequences both for the position of schools of social work in universities and for the funding of social work research activities.

The alternative suggested here is to make a conscious effort to build a connection between research in schools of social work and the field of social work practice and to develop some sense of nationwide focus for these research efforts. This would not be easy. In addition to the obvious difficulties, no practice-based profession is ever enthusiastic about research efforts that may threaten to raise questions about the soundness of the practice assumptions on which the profession is based. Yet it is only as these questions are raised and addressed that the social contribution of the profession can be improved. Social work is now becoming, in scope and public significance, a major profession. As one of the four core professions indentified by NIMH in the field of mental health, and as the core discipline in the development of the administrative structure for a system of public social services, it has a breadth of responsibility much greater than most of the

other human service professions. This also requires the type of serious study of the specific elements of social work practice that has not as yet taken place.

The emphasis on the study of social work practice may sound like a retreat from engagement in social advocacy and from the use of research essentially to document, for argumentation purposes, the severity of social problem conditions. Social problem studies, particularly those that deal with emerging issues in society, are still of great importance. However, social problems research, over the decades, has resulted in relatively little impact on the nature of social work practice. It has had impact on social policy, although there is no clear relation between the quality of the social problem research and the policy impact.

The priorities outlined here are particularly directed to the pattern of social work research in the academic community and the possibility of its distinctive function and are set forth as part of the effort to stimulate a larger discussion of these issues.

NOTES

1. Sidney E. Zimbalist, Historic Themes and Landmarks in Social Welfare Research (New York: Harper and Row, 1977), p. 17.

2. Frank J. Bruno, Trends in Social Work, 1874-1956 (New York: Columbia University Press, 1958). "This period [the 1890's] might be called the honeymoon stage of the interrelationship between theory and practice; between the teaching of sociology and the practice of social work. It was often assumed that a thorough discipline in sociology was the proper educational preparation for social work and ways by which more universities could be enrouraged to offer such courses were suggested." pp. 134-35.

3. Zimbalist, op. cit., p. 18.

4. Elizabeth Meier, The New York School of Social Work (New York: Columbia University Press, 1954).

5. Louise C. Wade, Graham Taylor, Pioneer for Justice, 1851-1938 (Chicago: University of Chicago Press, 1964).

6. William Reinlander Stewart, ed., The Philanthropic Work of Josephine Shaw Lowell (New York: The MacMillan Company, 1911), Chapter IX. "Relief seems to have all the disadvantages it possibly can have and none of the advantages. It serves to weaken the character, to excite the gambling spirit, the recklessness and extravagance which come of chance games; but it does not give the quieted peace, the power to live for worthier

objects than mere physical support, which an assured income supplies, while it also destroys all the incentive to activity, energy, and industry which are usually supplied by the struggle to make a living." p. 171.

7. Bruno, op. cit. "Abraham Flexner's study . . . undertook to define the criteria of a profession. He set them down as: an intellectual operation with a large individual responsibility; a basis of science and learning; progress toward practical ends; possession of an educationally communicable technique; a tendency to self-organization; and increasing altruism as he observed the operations of the social worker, Flexner could identify no method unique to the practice. Therefore, he did not think that social work was a profession, . . . The effect of Flexner's paper was profound and far-reaching. The challenge was accepted at its face value, and has set social workers to defining and perfecting their methods with a singleness of purpose that has all but blinded them to the fact that method is only one test." pp. 140-41. While the major effect of the Flexner speech was to push social workers to codify practice wisdom into a "method," it also had the effect of emphasizing the inclusion of material from the sciences in the curriculum on the assumption that this material would have a direct relationship to the application of theory in professional activity.

8. Ibid., p. 139. "Miss Richmond's paper took up Miss Dawe's thesis and defined the conditions under which such a school could be established, the sort of person needed to staff it, its cost, and something of its curriculum . . . she [Mary Richmond] was careful to point out that the curriculum should emphasize 'practical work rather than academic' material. The school should be in close relation with the public and private charities of the city, where students could observe social work practice under the supervision of their instructors. Classroom instruction should parallel experience in the field . . . the suggested school would not provide merely an apprenticeship on a different level. But it did not specifically include the teaching of method by classroom instruction; method was to be taught in field experience which paralleled the classroom instruction. The latter was to concern itself with the general principles which govern all social work."

9. David M. Austin, "Some Notes on Theory Issues" (Paper presented at the Conference on New Directions in Mental Health Research, March 1977, Human Services Design Laboratory, School of Applied Social Sciences, Case Western Reserve University). "From nearly all perspectives, social problems are defined by society rather than existing as a natural, empirical phenomena which can be studied apart from theory. Since the notion of the 'social construction of reality' applies so strongly to this particular area of human experience, the problem of selecting either a research method or a form of social intervention becomes highly complicated since the selection of the method of research largely determines the results that will be found through the research activities, the selection of a method of research prejudges the answer on the theoretical issues raised above."

10. Catherine Allen, "On the Importance to Policy of Defining the Family," 1977, (in draft). Five different definitions of the family are cited

with different implications for policy drawn from each.

11. From a published statement by Irwin C. Lieb, Dean of the Graduate School, University of Texas at Austin, whose academic field is philosophy. Discovery, June 1977. "The most distinctive requirement for the PhD degree is that candidates shall prepare a dissertation which is an original contribution to knowledge. Then in an extended examination, students have to defend the claims of their dissertations to show that their work is original but that, in being sound and justified, it is an important advance in knowledge as well. . . .the strain and trial, the fine challenge and opportunity of the doctoral dissertation is to make a work which steers between these extremes and is sound as well as original. Programs of graduate study should prepare a student to do a dissertation and beyond that to prepare him or her for a career of independently conceived and conducted study and research, writing and presentation. . . .the research which is done in the university is continuous with graduate study. Graduate students are apprenticed to experienced investigators and with them and from them they learn."

12. Joel Fischer, Effectiveness of Social Casework (Springfield, Ill.: C. C. Thomas Publishing Co., 1976).

PART III

ENHANCING QUALITY AND PRODUCTIVITY IN SOCIAL WORK RESEARCH

GAPS AND LINKAGES IN RESEARCH UTILIZATION: ENHANCING UTILIZATION THROUGH A RESEARCH AND DEVELOPMENT APPROACH

by Jack Rothman

In communicating with me about this paper,[1] the planners of this conference asked that I discuss aspects of improving and increasing the productivity of research. Several questions were posed that I might address myself to. Among these were the following:

1. "What are some suggestions for improving the translation gap identified by Lazerfeld?"

2. "How is research organized in social work?"

3. "What changes in national social work organizations can help to improve the utilization of research?"

There were additional questions, but I have chosen to limit my comments to these three as they already represent a prodigious undertaking for a conference paper of this nature.

Primarily, I will discuss the translation gap, but I intend to expand upon it to analyze the more general gap between research on the one hand and the application of research in areas of policy and practice on the other. I will offer a proposal for bridging this gap that has proved so troublesome for all of us for so long. The key to such a bridge lies in viewing research utilization as a continuum, comprised of various steps, roles, and technical tasks. The model that I will present demonstrates those mechanisms and processes that may be useful in linking the product of social science research with the world of human services practice.

In presenting this model I will draw on previous work that already may be familiar to some of you from my book, Planning and Organizing for Social Change.[2] In the years that have intervened since the publication of that work, I have refined and updated the model presented there, based on insights and experience my staff and I gained in researching and using the model through the Community Intervention Project, an applied research program I have directed over the past decade.

Throughout this paper I will be referring often to some familiar terms, but I shall be using these in an unfamiliar context. The

first of these is "research and development," an expression we tend to associate most generally with industrial technology and the physical sciences. It is my contention, however, that a research and development formulation provides an optimal conceptual framework for recognizing the elements and potentialities of the research utilization process as it applies to human problem solving. The second term is one that is capable of generating a great deal of heat, particularly when it is juxtaposed in some way with the social work profession. That term is "engineering," more specifically, "social engineering." Later, I shall discuss in some detail my view of the role of the social engineer. By then you will have some feel for how such an individual might function in the research utilization process.

The principle portion of my presentation will be directed to illustrating how social research might function as a fruitful basis for discerning where gaps exist in the research utilization process and what needs to be done structurally and technically to bridge them. I will conclude my analysis with implications of this research and development/research utilization model for the social work profession and for the organization of research within the human services.

The Research-Practice Dichotomy

The body of potentially useful social science knowledge gathered by researchers over the years is vast and expanding rapidly. That potential is poorly and haltingly tapped by human service policy makers and practitioners. The nature of the responsibilities of the human services professionals is such that, as a practical matter, they do not have the time or the opportunity to search the knowledge pool for that which would be useful to them and to make systematic application of what is there. Swift, easy, and efficient access to knowledge in a usable form has, heretofore, not been available to them.

The basic researcher in social science and the human services professional are divided by a common need: the effective utilization of social science knowledge. That division has not been without its consequences. Practitioners wait impatiently for researchers to provide information in a practical form. Researchers offer abstract information through journals, books, scientific papers at conventions, monographs, and so forth. They believe themselves to be effective communicators of their results and are often puzzled and irritated that the practitioner does not take advantage of what is offered. An undercurrent of tension, mistrust, and lack of confidence pervades the researcher-practitioner relationship--a function of equally pervasive misperceptions of one another's roles and functions.

Social scientists see practitioners as placing low value on intellectuality and high value on action or change for its own sake. Instead of orderly, systematic examination of issues that requires time and scholarly objectivity, practitioners are seen

to come to hasty conclusions and engage in actions not supported by adequate data. Practitioners, in the social scientist's view, are uninterested in self-criticism and are offended by outside criticism. They manifest a distrust and fear of research. This also is related to a narrow professionalism: such intense engagement in the specifics of a given problem situation that generalizations on a more abstract basis cannot be carried over from one context to another. Social scientists also resent the smugness of practitioners who feel that only they understand worldly problems or real people because of their direct, every day engagement. In addition, social scientists maintain that it is not their responsibility but that of the practitioners to draw implications for policy and action from research.

Clearly, the social scientist's perception of the practitioner is distorted. There is an equal distortion, however, in the practitioner's view of the social scientist.

Practitioners see social scientists as engaged in studies of low social relevance. The subject matter areas are largely asocial, trivial, esoteric, or abstract, and reflect narrow scientism rather than humanistic concern. Quite often if there is a social value orientation expressed in the social scientists' work, it is one of conservatism. The whole systems theory approach, in the practitioner's view, for example, is indicative of this static orientation. Social scientists are seen as avoiding the policy implications of their work, and their failure to relate the outcome of the research efforts to important social issues is perceived as stemming either from arrogance or lack of compassion. There also is a kind of compromised intellectual integrity in the bending of research pursuits to such exigencies of the moment as the availability of federal or foundation grants or to subject areas that will yield the largest payoffs in dollars and professional prestige.

The social scientists' preoccupation with methodological "gimmickry" and its attendant overinflated jargon, in the eyes of the practitioner, serve only to alienate those who seriously wish to draw on social science knowledge. Social science writings are viewed as exhibiting a sponginess about conclusions that can be reached. Practitioners are interested in definite answers to specific questions; instead, they believe, they find inconclusive generalities about broad theoretical matters.

It is obvious that different styles and modes of thinking divide the researcher and practitioner, making communication difficult and the use of each other's contributions and products problematic. The social distance between them--characterized by mistrust, differing outlooks, and ostensibly contrasting goals--is formidable. In the past this has inhibited fuller articulation between the social scientist and the social practitioner.

Perhaps the fundamental difference is one of function. Social scientists have the primary function of comprehending the world: producing knowledge that permits them and others to understand it

better. Practitioners have the key function of changing the world (or, more specifically, parts thereof): producing material effects that permit clients, organizations, or communities to behave more advantageously in terms of specific desired outcomes.

Research and Development As a Reconciliation and Linking Process

The situation may be dissected through an analogy to a lumbering operation. The social science researchers have gone into the forest of knowledge, felled many a good and sturdy tree, and displayed the fruits of their good work to one another. A few enterprising, application-minded lumberjacks have dragged some logs to the river and shoved them off downstream ("diffusion," they call it.) Somewhere down river the practitioners are manning the construction companies. They manage somehow to piece together a few make-shift buildings with what they can find that has drifted down the stream, but on the whole they are sorely lacking in lumber in the various sizes and forms they need to do their work properly. The problem is that someone has forgotten to build the mill to turn the logs into lumber in all its usable forms. The logs continue to pile up at one end of the system while the construction companies continue to make do at the other end.

To carry this analogy one step further, there has been governmental and foundation support for the logging operation. There has also been some support for the construction companies. There has been almost nothing, however, for the planning and running of a mill. In our view the social science research and development methodology is that mill. Fundamentally, R & D is a systematic process for bridging the gap between research and application. It permits the conversion of scientific principles to particular tools and procedures for dealing with real world problems. Brooks states the matter simply in the form of a query:

> ...how to use the knowledge which has been gathered primarily for its own sake--fundamental research. How is this knowledge to be condensed, summarized, repackaged, and interpreted for use, and how is it to be communicated to those responsible for action--the decision-makers, the technological innovators, the service professionals, and the students?[3]

Schutz, in his succint definition, concentrates on "the gap between scientific knowledge and user practices."[4] The need for linkage is reinforced by Carter:

> In evaluating contemporary problems in education and the social area generally, it seems there is a wide separation between the practitioners in these fields and those engaged in research in our academic institutions. We do not have the middleman who, as in the case of the engineer, is devoted to solving specific problems.....Such people are lacking in the education and social fields.[5]

Yet another specialist, Boyan, notes that "most observers have restricted themselves to an analysis of variability in factors which have been present. Only a few observers have asked whether essential elements have been missing . . . in the total process of converting knowledge into practice."[6]

The work of the Community Intervention Project in social research and development has been an attempt to focus precisely on these missing elements. It is, therefore, appropriate at this point to provide you with a brief introduction to our project.

The Community Intervention Project is an on-going R & D program. Our aim, primarily, has been to provide research-based and field tested intervention tools to professionals in community-related human service fields.

Our work has proceeded in a series of operationally linked steps. Our initial three years (1968-1971) involved a broad search of social science and professional literature. We sought to retrieve research findings pertinent to community and organizational intervention. Based on the empirical research findings, we developed a considerable number of generalizations and subgeneralizations. We then converted each of these to an applied form. This produced a series of "action guidelines" or strategies for use by professional change agents, practitioners, agency administrators, and planners.

In our second phase (1971-1974) we implemented a limited number of these action guidelines in a field test. In this test we sought to operationalize and to evaluate the guidelines in realistic application settings. In addition, we proposed to produce a practitioners' manual that would present specific steps, resources, personal and organizational contacts, and so forth, needed to implement these guidelines in human service agencies.

Our next phase (1974-1977) centered upon the development of a revised version of the manual geared specifically to mental health personnel. We also examined various approaches to diffusing the products of social R & D throughout the population of potential users.

Ultimately it is our intention to consolidate the R & D methods that have emerged from the project experience into an on-going R & D laboratory attached to a national human services delivery system. The lab will receive problems of system and employ a crystalized, coordinated research utilization/R & D technology to fabricate solutions quickly and to feed these back into the system in the form of operationalized strategies, techniques, and procedures.

The Research and Development Process: Major Phases

There are literally thousands of organizations, businesses, and governmental agencies that proclaim their association directly or indirectly with research and development. Beginning in the

early 1950s, R & D, like the terms "systems analysis" and "aerospace," took on a special measure of respectability and prestige with industrial, governmental, and scientific agencies and organizations. It was almost as though the integration of such terms into the corporate structure conferred a mystical power on a company that led directly to the federal grant trough. The ranks of quasiscientific and pseudoscientific companies looking for grant money burgeoned.

This may have been carried to its logical and absurd conclusion in the play, Go, Baby, Go!, wherein Kunkel Tool & Die transformed itself into the Universal Aerospace Systems Research and Development Corporation. The term "research and development" was carelessly and imprecisely (but profitably) used. This carelessness and imprecision over the years worked its way into the common parlance to the point where today there are very few of the lay public who fully understand and appreciate the process. This has prompted such specialists as Roberts to state that too often R & D, even for those engaged professionally in the field, "is based largely on facts and folklore, rather than on principles derived from facts." He deplores "the lack of true understanding of its processes, and a lack of an organized educational base for its managers."[7] Schutz likewise tells us that individuals in the technical fields that have thus far dominated R & D work have not been predisposed to conceptualize the methodological components of their own activities:

> [They] thus have given only modest attention to packaging their macro-strategies in a form readily cognizant to persons within the field or transferable to other fields such as education.... It is the methodology not the men of aerospace, architecture, business, engineering, and pharmacy that renders these fields ripe for contributing to the development in education [and the human services].[8]

Schutz urges his readers to identify commonalities in intellectual endeavors across the fields he enumerates. That there are such commonalities is indicated by the fact that it is possible to generalize conceptually basic features of the R & D process, regardless of the particular field in which it is employed.

A useful point of departure in conceptualizing R & D is the set of definitions propounded by the National Science Foundation and employed in its statistical surveys of the field. NSF lays out three relevant areas: basic research, applied research (which we shall call "design" for the sake of clarity and to reduce overlap with other concepts), and development. The definitions are as follows:

> BASIC RESEARCH:
>
> Basic research is primarily motivated by the desire to pursue knowledge for its own sake. Such work is free from the need to meet immediate objectives and is undertaken to increase

understanding of natural laws. Wide applications often come from gains in basic knowledge, or scientific concepts are extended or revised with far reaching effects.[9]

APPLIED RESEARCH or DESIGN:

Applied research is carried out with practical applications in mind and may...be concerned with "translating" existing knowledge into such applications....It differs from basic research in that it seeks to show or indicate the means in which the first pilot steps may be taken to reduce an abstract idea to a useful purpose. [It] serves to further specific agency missions, frequently as a forerunner to development.[10]

The sense of applied research as design, as we will emphasize in this presentation, is brought out by Holt, who defines applied research as follows:

Applied research is the systematic creation and application of knowledge through the organized effort of people working toward a specific [practical] objective....The purpose of applied research is to find a solution in principle (design concept) for a new or improved product, process, or material.[11]

The third of the NSF definitions is that of development:

DEVELOPMENT:

In development the findings and understanding derived from research are directed toward the production of useful materials, devices, systems, or methods; such work includes design and improvement of prototypes and processes. Development activities, which are dependent upon research results, usually involve engineering and testing to advance a component, product, or process to the point where it meets specific functional or economic requirements;...development is directed to very specific and generally predictable ends.[12]

The product of development, then, is something that is user-ready. It has a purpose that is well-defined, and it functions, ideally, in such a way as to fulfill that purpose in an optimal manner.

Havelock, in a major and widely recognized study of the use of social science knowledge, develops a slightly different model in which he designates the research, development, and diffusion perspective.[13] He thus introduces an additional key element to research and development, namely, diffusion. If a new product or tool or process is to be useful, it needs to be disseminated (marketed, promoted) and put into active operation by potential users. A product and its diffusion may be directed at a general population--for example, consumers, listeners, readers, and so forth. Alternatively, they may be aimed at a specialized, intermediary professional population such as physicians, broadcasting

engineers, or human service practitioners, and, later, directed through them toward broader target systems: clients or constituents, for example. By way of illustration, one can visualize the development of new drug products for direct purchase and use by consumers or for transmission by family doctors in their practice. For the purposes of our own explorations of social R & D, we elected to place emphasis on the development of intervention strategies for use by intermediary practitioners.

When Havelock speaks of diffusion, he uses such terms as "dissemination," "distribution," "installation," "adoption," and target system "integration." He also defines two specialized roles in the diffusion: sender and adopter. He sees the sender as engaging in activities such as "promoting," "informing-telling," and "demonstrating-showing." He views the adopter as engaging in collateral activities such as "awareness," "evaluation," and "installation."

Based on Havelock's concepts, then, we can now incorporate a fourth definition into this basic formulation of R & D:

DIFFUSION:

> Once knowledge has passed through this development phase, it is ready to be mass produced and diffused to all members of society for whom it might be useful.[14]

These, then, may be considered to constitute the basic phases of all research and development endeavors: basic research, design (or applied research), development, and diffusion. Such a four-fold view finds support from other sources. Ames for example, suggests an analogous model based on an analysis rooted in economics and related to new industrial operations.[15] The suggested "outputs" of each of Ames' "stages" are instructive:

STAGES	OUTPUTS
Basic Research	Laboratory results, hypotheses and theories, formulas, research papers
Inventive Work (Design)	Working models, sketches, inventions, patents
Development Work	Blueprints, specifications, samples, patents
New-Type Plants and Processes (Diffusion)	Diffusion and establishment of new-type factories

The phases in R & D are not precise, either in definition or with regard to the functions involved. Ansoff makes this quite clear:

> The fact that the degree of uncertainty can vary over a wide spectrum gives rise to a major difficulty in defining clear-cut separation between applied research and activities which precede and follow it. At one extreme, it is not uncommon to find applied research proposals whose outcome is so uncertain as to require, in fact, creation of new knowledge and which should, therefore, be recognized as basic research....
>
> It is not infrequent to find a product development project mistakenly classified as applied research. As in the previous case, such confusion can result in much misplaced effort and in even further-reaching consequences. The major problem arises from the fact that although applied research and product development activities are very similar (involving, usually, construction of a working device), their purposes are entirely different. The former is merely to show a particular problem can be solved; the latter is to start a chain of steps which eventually lead to offering a product to potential [users].[16]

Based on the Bell Laboratory experiences, Kelly suggests a somewhat broader scheme than our own four-fold formulation. The first two stages are identical to ours: basic research and applied research (or design). He divides development, however, into what might be viewed as two substages: development and design and engineering for manufacture.[17] The distinction between these two substages is based on what people in the field often refer to as "front end" (or early) development and "back end" (or advanced) development. The front end is the initial phase that overlaps and blends with our notion of design. The back end is the late phase that may have a close interplay with fabricating and diffusion. Kelly includes in diffusion such activities as manufacturing, and distribution and installation. He makes the additional point that it may be useful for different stages to have some degree of autonomy. To the degree that this is accomplished, however, strong cross linking procedures are necessary.

In many ways, development is the most complex, multidimensional of the stages. For this reason its composition has been described in greater detail by a number of writers, such as Schutz[18] and others from the Far West Laboratory for Educational Research and Development.[19]

The staff of the Far West Laboratory drew from a number of their different project experiences to construct what they consider a general progress pattern of development process. That general pattern and its correspondence to our own efforts is as follows:

Develop a Preliminary Form of the Product	[This corresponds to the creation of our initial Guideline statements]
Do Preliminary Field Testing	[Our Pilot Testing program]
Product Revision	[Our preliminary handbook]
Main Field Testing	[Our Main Field Testing program]
Operational Product Revision	[Our second handbook revision]
Operational Field Testing	[Our securing the feedback on the revised handbook]

According to the Far West Laboratory group, these activities are followed by a set of tasks in the diffusion stage. These include preparations for dissemination, completion of a final report on the field test evaluation, and implementation of new products and techniques in widespread target settings. This cyclical pattern of testing-evaluation-development-testing is identical to the basic design followed in our own work. Consider the process we followed: we created our initial guideline statements; we tested these in a pilot setting and developed a preliminary version of our handbook to guide implementation of those guidelines; we subjected this to intensive scrutiny in a main field test; we revised the handbook on the basis of that experience; we obtained feedback from potential users in a wide variety of real world and academic settings that led to still further revision until that handbook could take the form of a final, user-ready product. This is precisely how the development process in social R & D theoretically should operate.

A Research Utilization Research and Development Model

Entering the world of social R & D, one feels a bit like Dorothy stepping out of her house and into the Land of Oz. It is a country of considerable interest and excitement, but one that is almost totally unfamiliar. And like Dorothy, those of us in social R & D are also much in need of a yellow brick road.

As part of our endeavor toward the understanding and application of research and development in the social sciences, we have formulated a working model of what we view as the basic flow of activity in social R & D. It is largely an empirical, inductive formulation. It grew out of actual experiences of the Community Intervention Project as we attempted to move between existing basic research findings and practical intervention tools. We believe it summarizes and organizes in an effective way the concepts we have been discussing thus far. Whether what we have built is the best yellow brick road remains to be seen. It is, however, one avenue we have found useful.

Our model is composed of six material stages linked by five operational steps. The model is diagrammed in Figure 1. At the bottom of the model we have indicated the four basic phases of R & D to demonstrate how the model interfaces with the various concepts and definitions of research and development found in the literature. This interface between R & D phases and research utilization steps and stages is the main new conceptual idea I am introducing here. For those unfamiliar with my previous work, I will succinctly summarize our current formulation of research utilization steps.

The model starts with a social goal or a social problem that is of interest to some group or organization concerned with social welfare or the delivery of human services. The existing body of empirical social science knowledge is examined as a source of possible solutions for the social problem or as a source of possible direction toward achieving the social goal. The model moves along a continuum to wide application by human service professionals in the field. Each of the five operational steps, located within the arrows to indicate their more active function, results in a material stage that is a landmark product.

Such products might be experience, data, devices, procedural manuals, training manuals, and so on. Each material stage with its products, represented by the boxes in our model, leads in turn to the next operation and is the basis for that operation. In the rather detailed narrative description of each material stage and operational step that follows, it will help to refer back to the diagram (Figure 1). In this way you will be able to keep in mind where each of the various components fits in the larger design.

Material Stage I: Basic Pool of Social Science Research Knowledge

This is the reservoir of existing empirical research data available in the formal literature of the disciplines and professions. It also includes less formal sources, such as agency reports, dissertations, and project memoranda. Some of this material stands independently, and some is referenced in index books or computer banks of various types. Other material is both referenced and abstracted in index books or computer banks. What bodies of literature and data are selected for scrutiny depends on the nature of the social goals and/or social problems that are being addressed through the social R & D effort.

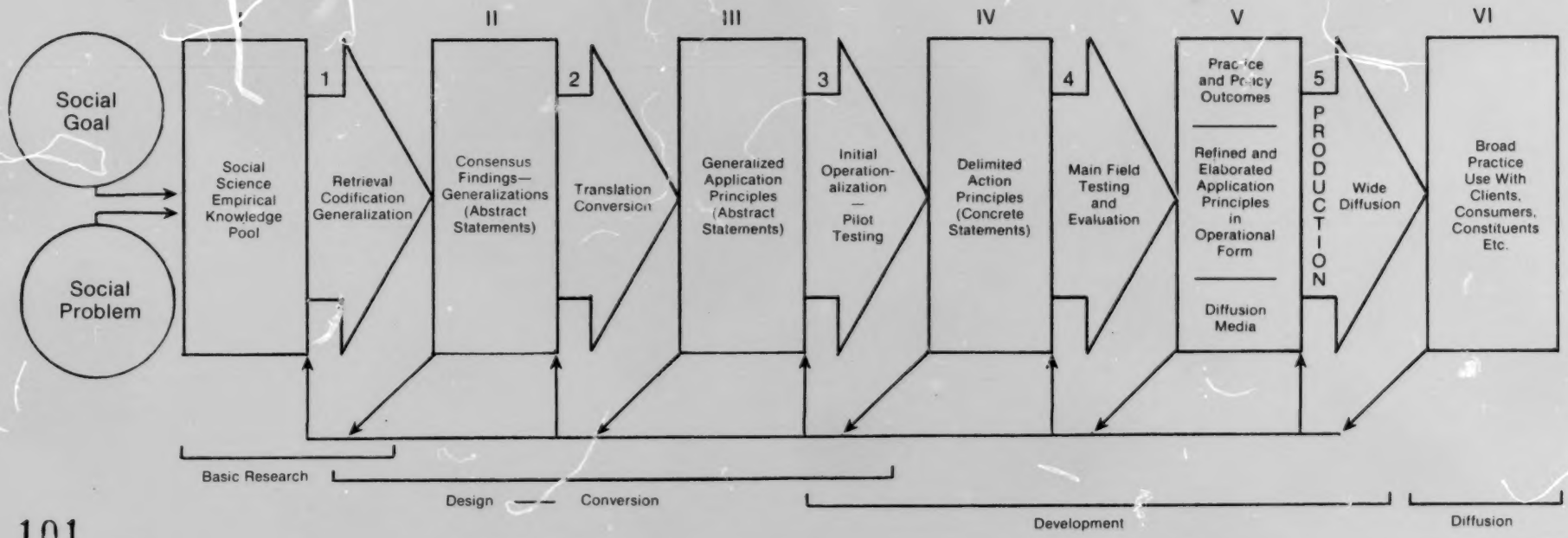
Operational Step 1: Retrieval, Codification, Generalization

1. This step requires the location of pertinent research data sources in terms of presenting practice problems or objectives. Both primary and secondary sources are possible, including the use of stored information pools.

2. Those studies bearing on the problem or issue at hand

Figure 1

Schematic Model of Research Utilization R & D Process



must be selected from the source pool. Here one encounters problems of nomenclature, including the appropriate selection of descriptors. Problems of traversing the disparate taxonomies of knowledge in social science and social practice present themselves. Practice perspectives ordinarily need to be transplanted into typical scientific-linguistic analogs in order for scientific sources to be exploited and later reconverted.

3. Data must be assessed for reliability, validity, and applicability.

4. Data must be codified into suitable categories of knowledge.

5. Work must be done toward discovering consensus findings or recognized uniformities within the selected data.

6. Work must sometimes include formulating generalizations and propositions from consensus findings.

Material Stage II: Consensus Findings, Generalizations, Propositions

As the previous description of operations implies, the product here is one or more generalizations based on certain accepted scientific laws or principles or on the convergence of a number of disparate findings of research studies. Where numerous studies in varying circumstances, using different subjects and methodologies, are in substantial agreement, one can have a greater degree of confidence in the validity of these generalizations. This is particularly true when there are few, if any, findings that yield counterconclusions.

The generalizations will be abstract, as a result of their tendency to synthesize diverse studies and to arrive at scientific uniformities. They will also tend to describe social phenomena rather than provide intervention prescriptions. This is not surprising, since most social science research deals with describing and understanding the social world rather than changing it.

Consensus findings may be descriptive of a simple, empirical regularity, or they may be propositional in describing a consistent, uniform relationship among two or more variables.

Operational Step 2: Conversion and Design

The essential task here is cognitive application.

1. Translations now need to be made from scientific language back to language more suitable to the categories of normal usage in applied situations.

2. Conversion from descriptive to prescriptive formulation may entail making an "inferential leap" across the gap between generalization and practice principle. This is the design and "front end" development aspect of R & D. The size of inferential leaps and the direction of application need to be considered (toward achieving organizational stabilization or organizational change, for example.)

3. "Reality" dimensions--such as feasibility, or implementability of a given application, cost, limiting conditions and qualifiers that restrict or channel use--must be weighed at this time.

Material Stage III: Generalized Application Principles

These are the outputs of the translation-conversion-design process. The prescriptive formulation we call Action Guidelines are representative of products in this stage. These prescriptive statements, while now of more immediate relevance to practitioners, are derived from broad consensus generalizations. They tend also to be constituted in rather abstract form. At this level, the concrete implementation of application principles is left to the creative efforts of practitioners, unless the utilization process is carried forward into further stages. In industrial R & D, a fairly tight, mathematically supported design may have been produced. Its workability and economical feasibility remain in question.

Operational Step 3: Initial Operationalization, Pilot Testing

Operationalization involves more finite specification of locations, contexts, materials, resources, and behaviors for implementation. Two examples are the type of agency setting and the types of people to whom the application pertains--more generally, what the empirical referents for all elements of the application principle are.

Operationalization may be partially a cognitive-perceptual task, but it must include actual experimental implementation or engineering as a way of testing and developing the empirical specifications. This requires the conducting of a pilot test in the intended implementation setting, or with the materials, processes, and actors of that setting. In part, pilot work is necessary in order to determine whether the design concept will work under real conditions. In this step the practitioner functions in a front end social engineering role.

Material Stage IV: Application Principles in Delimited Form

Initial operationalization results in a much more detailed, narrowed, practical exposition of application principles. It may involve greater concretization of each of what have become identified

as the key elements contained in the application principle. In this form application may be discussed in mental health centers, for example, as compared to city-planning agencies; large cities as compared to small cities; agencies with sizeable budgets as compared to those with limited funding; and so on. Specific actors, procedures, or resources may be indicated. Initial working models or prototypes result from this early pilot work in fabricating operational forms of the design concept. Such an operationalized statement of application gives a practitioner a great deal more direction and some confidence in the workability of the application formulation. In our work at the Community Intervention Project the preliminary version of the practitioners' handbook was the product of this stage.

Operational Step 4: Fuller Implementation--Main Field Testing

1. This step assumes the availability of a preliminary procedural manual, working documents, audiovisual materials, and so on that can be put in the hands of development engineers. These social engineers are expected to fabricate a detailed and durable operational form of the design concept.

2. The purpose of the main, full field study is to determine whether the materials will be usable by a broad cross section of user-practitioners. The R & D main field study also seeks to modify, expand, and more clearly operationalize the design concept and to assess its effectiveness with respect to intended outcomes with clients, consumers, and so on. Performance testing through careful evaluation of outcomes is especially important. Fairly firm specifications of the conditions, constraints, and procedures of application can be delineated. This step incorporates elements of evaluative research but places it in a more productive R & D context. This form of reality testing may yield feedback that modifies the action principle or may even modify the basic theory that generated it.

3. Some field tasks include selection of sites or users, recruitment and training of a social engineering staff, incentives for use, entry problems, clarification of the role of field practitioners, and of the relationship to the role of applied researcher.

4. Research tasks include designing a suitable methodology for study and development of instruments; monitoring; adjustment for special problems such as practitioner-engineer resistance or Hawthorne effects; evaluation of effectiveness; and the development of criteria for rejecting, modifying, or authenticating the design concept.

Material Stage V: Practice and Policy Outcomes; Tested, Refined and Elaborated Design Concepts; Diffusion Media

At this stage several useful products should have been brought into being. In the first place, it is now possible to determine the impact of the operational design concept when applied by a cross section of actual users. This type of assessment may be carried through by means of formal research procedures or less formal observational-assessment approaches. Ordinarily, the product of main field testing is given an additional test by potential users in order to remove remaining bugs and to complete "fine tuning" of the tool or process or product. It also may indicate problems and possibilities to be taken into account in the subsequent diffusion stage.

Finally, based on the field experience, diffusion materials incorporating results of the field work--practitioner manuals and/or handbooks, audiotapes, videotapes, documents, charts, and so on--may be crystallized.

The feedback between Stages V and IV may be heavy and recurrent. There may be a number of cycles of trial, modification, and retrial. The cyclical nature of development is particularly pronounced here. Thus the newly revised version of our practitioners' handbook was further evaluated by practitioners in application settings.

Operational Step 5: Production and Wide Diffusion

This step includes:

1. The mass reproduction of media incorporating operationalized solution strategies: handbooks, manuals, charts, forms, and so on. Production is ordinarily "farmed out" to a printing firm or media house that has the experience and resources to carry out this technical task. In an expanded version of the R & D model, one might conceive of production as a separate step and stage, as in the area of industrial R & D.

2. Isolation of a universe of specific practitioners or organizations who are potential target users. This should initially be done at the outset of R & D but needs further specification and reassessment at this time.

3. The determination of their attributes, attitudes, and needs must be made. This is, essentially, a form of marketing research.

4. Selecting appropriate informational and promotional approaches and further packaging utilization materials in an attractive, responsive way must be accomplished.

5. Potential users must be reached and motivated.

6. Functional gatekeepers, opinion leaders, or informal professional networks may be located to use as diffusion channels.

7. Users may need to be provided with initial training and reinforcement.

8. Procedures must be developed for scanning results of wider application, and so on.

Material Stage VI: Broad Practice Use

The end result of the process should be widespread use of the developed application principle in the field. By this time the principle should have withstood testing, and means of effectively communicating its appropriate implementation to practitioners should have been developed. The eventual beneficiaries are clients, consumers, and constituents in the human services system. Broader experience with clients, involving both method and outcome, should again hypothetically feed back on the entire process, suggesting modifications and refinements for every stage, right back to basic research.

We have, quite understandably, focused this R & D process on our own work at the Community Intervention Project; and we have illustrated it with our own experience. However, for "practitioner-user" one may read "manager-user," "teacher-user," "politician-user," "labor union organizer-user," or any potential applier of basic social science research converted to an operational form through the social R & D process.

The four basic components of the R & D process synchronize with the Research Utilization Model in the following way:

Basic Research: Stage I, possibly also Step 1 and Stage II.

Conversion & Design (Applied Research): May overlap Step 1 and Stage II. Concentrated in Step 2 and Stage III. May overlap Step 3.

Development: Step 3 though Stage V.

Diffusion: Step 5 and Stage VI.

A clarification of R & D-Research Utilization may be in order at this point. Our primary work in the Community Intervention Project was the development, field testing, and diffusion of prescriptive formulations for human service practitioners. We were not hypothesis testing in the traditionally accepted sense of the term. The generalizations upon which our action principles were based had already been established. Thus there was no question of "proving" or "disproving" the derived action principles. Rather, the process in which we engaged was dedicated to achieving a formulation of those

principles in effective, operational forms. This is the development aspect of the R & D process. Fieldwork through evaluative performance testing indicates whether and under what circumstances the application design "works." The result is a working device rather than a scientific principle.

Not all conceptions of R & D take an approach emphasizing stages and components in the type of dynamic formulation represented by my depiction of the R & D process. At least two additional perspectives are to be found. The first views R & D from a systems engineering and scientific management point of view. This perspective emphasizes the bringing to bear of rationality and efficiency in attaining goals within a complex technical task environment.[20] Terms such as "organized creative technology"[21] are employed to characterize the approach, and it is seen as achieving "improvement in quality, reliability, and uniformity of final output" and "decreased cost" in production operation.[22]

Another posture is that of contributors to the journal, Educational Technology. Here the stress is on the production of educational media through careful planning and in situo testing with the intended consumer group. The intellectual tradition is that of learning theory or behavior modification, and the context is effective, empirically evaluated, instructional design--not necessarily the deliberate conversion of specific substantive scientific knowledge into operational programs and tools. What is carried over and applied in this context is learning theory. Educational R & D follows this format in large measure.

Commenting on the usual modus operandi in developing social programs, Etzioni makes note of lack of systematic, step-by-step planning and developmental process as described above:

> We have learned from the social programs of the '60s, the campaigns against drug abuse, crime and cancer and the recent drive to develop new energy resources, that in trying to use national resources to overcome our social problems, highly ambitious projects have often been attempted without a sufficient knowledge base or back up. Multibillion-dollar programs, conceived in Washington, D.C. were introduced based on verbal concepts and with little testing or prior research. We cannot afford, in human or financial terms, the expensive wrecks that result. We need fewer but better-researched and developed government programs.[23]

Etzioni goes on to recommend a way of functioning that incorporates many of the basic features of the social R & D/Research Utilization Model that I have been elaborating in this presentation:

> It is fairly standard practice in the engineering of new spacecraft, weapons, airplanes, even toys, to move systematically from a theoretical concept to a pencil-and-paper design, to a small-scale model that is subject to various tests, leading to the production of one or a few full-scale prototypes--all before

> mass production is authorized. Normally, at each stage modifications are made on the basis of experience gained precisely because as a rule we cannot anticipate or reason out all reactions and developments. New government programs [and attempts at social problem solving] need to go through a full and as careful a process of research and development as new technologies.[24]

Research and Development--Social Work Relevance

Typically, researchers and action people berate one another for failures in communication and deficits in application. These ad hominem accusations result from a lack of recognition that this is basically a structural problem. There is an absence of a linking technology and linking instrumentalities for connecting social theory to social practice. The vast, complex network of engineering roles and institutions characteristic of the physical sciences is completely missing in the social field. It is as though a theoretical physicist at Princeton were expected to state his propositions and theorems in a form that could be put to use immediately by the factory foreman in Bayonne, New Jersey.

The major implication to be drawn from this analysis is that social work and the other human service professions ought to move toward the creation of an engineering capability--that is, institutionalized linking roles and structures of various kinds that would serve to expedite the transition between research knowledge and social policy and practice. Some essential features of such an institutional pattern are suggested by Guba, an educational R & D specialist, in discussing the character of Bell Labs:

> A. T. & T. in its wisdom has interposed a vast organization between the knowledge producers and the ultimate consumers. This system, known as Western Electric, has its own coterie of engineers, who are themselves divided into specialities. Some of their personnel are concerned with developing prototype applications; others with testing these out and debugging them. Still others are concerned with designing these applications in ways that will make their production feasible and economical. And finally, of course, there are productive specialists who actually turn out the devices that will be installed and used by the Bell Telephone companies.[25]

Guba points to the absence of corresponding liners and conversion mechanisms in the social fields. This results in blockages and inefficiencies in knowledge utilization. This defect goes unrecognized within the professional structure itself. Instead, personnel tend to "write-off the research-practice gap as stemming from the uncooperativeness of the researchers or the laziness and ignorance of the practitioners, or both."[26]

When viewed in this way, it becomes obvious that in the social field, not one, but a multiplicity of different gaps are discernable and that various points of linkage and coupling are unattended.

The way research is organized in the human service professions does not alleviate the problem. Scholars and doctoral students in the schools of social work and the disciplines accumulate knowledge, reporting their results too often in the main to other scholars, and only occasionally suggesting in fairly rudimentary fashion some practice or policy implications of their findings.

Another avenue of research production is in agency settings of various kinds. Here, for the most part, we find operational research or program evaluation, studies that deal in a narrow way with a peculiar field problem and its solution within the situation. These studies reflect parochial empiricism for they are ordinarily not generalizable beyond the situation. Further, in many cases there is insufficient effort to draw upon existing social science theory and knowledge to illuminate the research task. Use is made of the technical methods of social research but not the cumulative substantive knowledge that has been produced by these methods.

Research sponsored by governmental bodies takes the same bifurcated form. On the one hand one finds bureaus such as NSF or NIMH that emphasize grants to scholars to pursue basic or "pure" research. On the other hand, functional agencies such as HEW and HUD are relying increasingly on RFPs and contracts, where specifications are strictly delineated and geared to concrete operational problems. In countering a previous tendency to allow overly vague and abstract theoretical studies, these agencies are engaged in a pendulum swing toward overly rigid applied studies.

An alternative policy would be to give greater weight to the terrain that lies between basic research and agency practice: the domain of conversion, linkage, and application. Movement in this direction would require the establishment of a range of linking roles, procedures, and structures. It also would involve a mixing and blending of scientific and applied interests and competencies. This is a large subject that I can touch upon only suggestively in the time remaining.

Linking Roles and Procedures

Looking back at the Research Utilization model, a number of derivative linking roles come to mind. Among these are:

1. Information retrieval specialists.
2. Program and policy design specialists.
3. Development personnel: program implementers, development researchers, performance-testing technicians.
4. Media fabrication people.
5. Diffusion experts.

Some of these roles currently exist to some degree, but not in the explicit, structured, and interrelated way that has been suggested. For example, information specialists can be found in the human services. Diffusion staff may be found there also, performing training and literature dissemination roles. Indeed, salespeople in publishing firms are among the most active disseminators of social science findings and products. Some roles are extremely rare at present, especially the conversion-design specialist and the array of roles associated with the development process. Outside of educational R & D, development in the sense denoted here has been almost unknown in the social fields.

An interesting and potentially useful role is that of the "research utilization specialist." This role has been instituted within the vocational rehabilitation field and has been subjected to evaluative study by Glaser and Backer. According to these authors:

> The RUS job role was aimed at effecting change in the operation of the state rehabilitation agency that leads to sustained, worthwhile improvement in service delivery.... The RUS' mission included creating an improved organizational climate within which application of new knowledge would be likely to take place.[27]

The listed activities that were performed included knowledge search, conduct of special projects, consultation to agency staff, holding conferences and workshops, and information dissemination. Glaser and Backer have delineated strength and weakness of the new role and have suggested some criteria that are associated with successful performance.

The research utilization specialist performs as a research application agent within an operating agency. A variation of this role is that of extension specialist who reaches out from a sponsoring knowledge-diffusion agency to other organizations in the community and to the community at large. This reformulation of the agricultural extension agent role has been advocated for the field of education, for example, by David L. Clark.[28]

With regard to linking procedures, the research utilization conference has been suggested and used by a variety of organizations in such areas as poverty,[29] vocational rehabilitation,[30] and pollution control.[31] In connection with these experiences, studies have been made concerning more effective ways of using the conference as a means of stimulating awareness and utilization of research findings by practitioners and policy makers. A variation here is the "traveling seminar project" that has been employed by the System Development Corporation.[32]

The Environmental Protection Agency indicates a variety of media they have used to stimulate action based on research. Among these they include design manuals, technical capsule reports, seminar publications, handbooks, process and project brochures, newsletters, videotapes, and motion pictures.[33]

Other linking roles and procedures have been used or can be envisioned. These few examples, however, should suffice to indicate the potentialities.

Linking Organizations

Several of the specified roles and procedures can be absorbed within existing organizational structures. For example, the information specialist can be part of the continuing education program of a school of social work[34] or a specialized service of a social agency.[35] On the other hand, it would seem desirable to create new organizational forms that would have a focused research and development function, cutting across several or all of the roles and procedures that have been previously described. In the physical sciences and in industry such a specialized structure is the research and development laboratory. It would seem advisable and appropriate for the human service fields to create analogue structures. Such structures could be located within large service delivery systems related to mental health, aging, child welfare, and so on. Alternatively, they could be associated with schools of social work.

In a previous publication I have suggested that graduate schools of social work and other human service professions have unique attributes as linking institutions and that research centers and institutes located within professional schools are particularly suited to undertake knowledge-linkage roles. Such a view finds support in a report of the National Science Foundation: "The professions--law, medicine, engineering, social work, journalism, mental health work, and education--are among the main social institutions through which social science knowledge can be translated into day-to-day practice....The professions have a distinctive role in the translations of knowledge into action."[36]

The academic configuration is largely responsible for this in schools of social work. Faculties are composed of instructors with responsibilities for teaching both intervention skills and fundamental social science and research content areas. It is quite true that any particular department within a school, possibly of necessity, may define its mission in rigorous if insular and static categories. Nevertheless, the school of social work as a whole offers exceptional opportunities for academic-professional interactions. The result is a structure of great potential for the promotion of research utilization. The focus of such a school on human and social problems--rather than on transmission of the traditional cognitive categories of the disciplines--affords opportunities to cut across these categories. It is rather disconcerting that this potential is not fully exploited. We are not taking full advantage of the possibilities this profession setting offers for interdisciplinary problem solving with all its attendant virtues.

In working in the interstitial terrain, it is important for new research utilization organizations to take into account two factors. One is that an intermixture of disciplines is necessary, some

from the more scientific realm and others from the practice world. This concurrent interplay of competencies and outlooks may cause strains, but it insures the multiple perspectives necessary for effective research utilization. Eash, in comparing a range of research utilization models, concludes that the "coaction model, involving researcher-practitioner collation is the ideal means of stimulating R.U. in the field of education."[37]

A study by Price in a more distant subject area seems to give further support for a collaborative arrangement. He found that the Oregon Game Commission was more successful in introducing new wildlife-management knowledge than the Oregon Fish Commission. The Fish Commission was dominated by researchers with graduate degrees in biology. The hatchery men whom the Fish Commission served felt a considerable social distance from the Fish Commission. This was accompanied by a lowered respect for the researchers and a resistance to acceptance and use of their findings. The Game Commission was more broadly structured, made up of those with both applied and "pure" research orientations. The gamekeepers whom the Game Commission served felt far less social distance from the commission and were more generally disposed to accept and use its findings.[38]

The other key ingredient is that research aspects of development should be carried out in applied settings--that is, in settings as close as possible to those of the eventual user. This means moving the apparatus of research outside the laboratory and the university and into the world of human practice. Gordon and Marquis supported this view in a study in which a panel of well-known medical sociologists rated the innovativeness of project proposals submitted by nearly 250 directors of projects being conducted in universities, health agencies, medical schools, hospitals, and clinics. Their data indicated that research conducted in applied settings not only tended to be more innovative than that from purely academic settings, but that the research could be more easily assessed and adopted in applied institutions.[39]

Recently, I have made some suggestions concerning the structural requisites for specialized R & D organizations having the interdisciplinary competencies and applied locus explicated in this discussion--especially institutions conducting complex social research and development programs.[40] This is not the occasion to delve into this subject in any detail. I will briefly suggest, rather, some implications of the discussion for the organizational activities of the Council on Social Work Education and the National Association of Social Workers.

It seems to me that CSWE should do more to encourage the teaching of some of the linking and social engineering roles enumerated earlier. I recognize that these roles and skills are difficult to communicate because they fall outside of, or between, the existing disciplines and professions. Nevertheless, a certain amount of vision and creativity can be exercised in creating momentum in that direction. In part such a movement implies working with faculty from a broad range of social science disciplines in a more intensive, collaborative

way. This may mean jointly listed courses, shared courses, collaborative research studies, and so forth. Schools should insist that research courses not stop at the point where methodology has been presented for "doing social research." Research courses also should include material on utilization, conversion, design, development research, and so on. Further, even usual research methods courses should stress to a greater degree problems of applied field research, working with practitioners in agencies in the research process, collaborating with researchers from the disciplines in conducting studies, and so on. Much along these lines is already being done, but much still remains to be done. It seems to me schools also could assist in the development of new or hybrid institutions: departments and research centers geared to research utilization and to research and development. Research and development labs could be sponsored by schools of social work and schools can take the initiative in helping to institute separate departments of social engineering on the campus.

The role of NASW seems equally clear. The association could certainly take initiatives to make research more respected and accepted within the profession. Certain steps, such as the new research journal, are in the right direction. There is some good reason for the skepticism that social workers have exhibited toward research in the past. Much of the research that has been produced has been in the model of classical scientific investigation rather than in the spirit of medical or engineering research. A certain degree of prestige has been connected with this course, even at the expense of utility for problems faced by professionals in the field. The profession can play a vital role by encouraging more research, and at the same time insisting on its functional relevancy to problems of practice and policy. It should demand from the professional research community clear and direct articulation with professional policy and practice concerns. I am not advocating the abandonment or weakening of basic research. There should be a continuing, powerful force in that direction, mainly from the social science disciplines. The human service professions can perform a useful service, however, by generating a countervailing tension in the direction that I have set forth in this paper. Both basic and applied research have important functions and are to be valued. Basic research has dominated the academic scene in the social area. There now is a need to create a better balance through the development of more activity and better methodology in the applied sphere.

NASW can help improve the quality and the utility of research through multiple activities, such as publications on the subject, establishing committees to deal with the problem, working toward the establishment of some of the new roles, procedures, and institutional forms that have been outlined, and creating internships and offering scholarships for young professionals who wish to train to perform these roles. Perhaps it should sponsor a follow-up conference similar to the one we are now attending.

This is for starters. Those who are more familiar with the

workings of the organization can, I am sure, expand this list many-fold. Whatever our course, we must recognize that there is a social engineering function that must be introduced into our professional activities, without which the distance between research and practice must go unbridged.

The skeptic and the humanist may be troubled by my use of this term: "social engineering." For many in the social sciences, social engineering is an emotionally loaded concept, engendering the image of a callous, technocratic approach to areas of social concern. Let it be clear that this is not what I imply nor what I intend. My value stance in undertaking my social R & D work of the past ten years has been open and specific, set down in the first formal publication of the Community Intervention Project:

> I have come to my subject with certain points of view (read biases) that ought perhaps to be made explicit at the outset ....My social perspective involves a commitment to the elimination of social injustices and economic inequities. This implies working toward a social structure where concepts of the common good or the collective fate of the community are brought into better balance with a professed preoccupation with "individualism." In other words, the public welfare broadly viewed is of higher moment on the scale of human values than is private profit.[41]

I use the term social engineering in a deliberate, precise, and consistent manner, rather than in the global way it is often employed. This usage is conveyed in a common dictionary definition of engineering: "The art and science concerned with the practical application of scientific knowledge, as in the design, construction, and operation of roads, bridges...communications systems, etc."[42] This accents the idea of converting basic scientific knowledge toward useful purposes. I believe that social engineering is identical in this connection to physical engineering, and I look upon it in paraphrase form as: The art and science concerned with the practical application of social science knowledge, as in the design, construction, and operation of programs, techniques, agency structures, and so on.

It is obvious that there is some peril in the use of the term, "social engineering." It has been used in the past in an extremely loose and varied way. This may tend to contaminate the concrete and delimited meaning we attach to it here.

The purposes of social engineering, as I envision them, are aimed at the solution of social problems and the enhancement of the less powerful or less advantaged members of society. It is my hope that social R & D will particularly promote the more effective and humane provision of services to members of the community. Tools to assist people directly or indirectly toward these ends are viable outgrowths of social R & D.

At the same time, it is true that any new technology (nuclear

energy, aerospace flight, new drugs) is, in itself, value-neutral and can be employed by human users for multiple purposes--evil or beneficial, destructive or elevating of human worth. Social technology is no different from physical technology in this respect. Scientists or engineers who invent a new technological method cannot control the way in which it is ultimately carried forward. They can only communicate their intentions and hopes regarding the eventual impact on human kind. There is a chance that conveying a philosophical perspective may in some way give direction to the way the technology is put to work.

Engineering, for some, goes beyond mechanistic neutrality to decided negativism. Indeed, the dictionary carries this popularly held view of engineering: "To put through or manage by contrivance: to engineer a scheme...maneuvering."43

There exists the danger that social R & D techniques can be employed in this cynical way, but this need not be inevitable. We have been able to avoid this in our own program over a considerable number of years. Indeed, our development of social R & D methods was predicated on the assumption that they aid human service professionals to bring about beneficial social outcomes in a more powerful way than existing methods have been able to accomplish through the planned and systematic application of social science research knowledge.

As this presentation has demonstrated, there is a range of conceptual technical, and value considerations to be faced in better using social science knowledge to deal with pressing problems confronting social work professionals. I have suggested that one vehicle for exploring these and for making headway with this complex question involves transposing, in a careful and selective way, the methodology that has evolved in the physical sciences and industry through many years of study and experimentation in linking research knowledge to applied problems. The human service professions have come to the point where they can stop emulating and duplicating the basic social sciences as part of a way to gain legitimation status. The social sciences have been achieving an increased level of maturity and public acceptance, and we professionally based researchers have demonstrated our skills in mastering their techniques. The new frontier before us is the systematic application of social science knowledge and methods--the realm of linkage in the manner of engineering and medical research. This frontier opens a new land that we are uniquely equipped to enter and singularly responsible for charting. A sign of growing maturity in social work research may well be its recognition of this task and its commitment to undertake it.

NOTES

1. This paper is adapted in part from Research and Development in the Human Services: Toward a Systematic Methodology of Applied Social Science (Englewood Cliffs, N.J.: Prentice Hall, forthcoming, 1979). The research on which this paper is based was supported by the National Institute of Mental Health, Grant No. MH 161125.

2. Jack Rothman, Planning and Organizing for Social Change: Action Principles from Social Research (New York: Columbia University Press, 1974).

3. Harvey Brooks, "Scientific Concepts and Cultural Change," Daedalus, Vol. 94 (Winter 1965), p. 126.

4. Richard E. Schutz, "The Nature of Educational Development," Journal of Research and Development in Education, Vol. 3 (Winter 1970), p. 39.

5. Launor F. Carter, "Knowledge Production and Utilization Contemporary Organizations," in Knowledge Production and Utilization, ed. Terry L. Eiddell and Joanne M. Kitchel (Columbus, Ohio: University Council for Educational Administration, and Center for the Advanced Study of Educational Administration, University of Oregon, 1968), p. 17.

6. Norman J. Boyan, "Problems and Issues of Knowledge Production and Utilization," in ibid., p. 22.

7. Edward B. Roberts, "Facts and Folklore in Research and Development Management," Industrial Management Review, Vol. 8 (Spring 1967), p. 5.

8. Schutz, op. cit., p. 6.

9. National Science Foundation, Federal Funds for Research, Development and Other Scientific Activities, Vol. 15, Fiscal Years 1966, 1967, and 1968 (Washington, D.C.: Government Printing Office, 1969), p. 1.

10. Ibid., p. 15.

11. Knut Holt, Product Innovation (Trondheim: The University of Trondheim, The Norwegian Institute of Technology, 1975), p. II/61.

12. National Science Foundation, op. cit., p. 19.

13. Ronald G. Havelock, Planning for Innovation Through Dissemination and Utilization of Knowledge (Ann Arbor, Mich.: Institute for Social Research, Center for Research on Utilization of Knowledge, 1973).

14. Ibid., p. 2: 42.

15. Edward Ames, "Communications: Research, Invention, Development and Innovation," American Economic Review, Vol. 51 (June 1951), pp. 370-81.

16. H. I. Ansoff, "Evaluation of Applied Research in a Business Firm," in

Technological Planning on the Corporate Level, Proceedings of a Conference Sponsored by the Associates of the Harvard Business School, September 8 and 9, 1961, ed. James R. Bright (Cambridge, Mass.: Harvard University Graduate School of Business Administration, 1961), pp. 210-211.

17. Mervin J. Kelly, "The Bell Telephone Laboratories--An Example of an Institute of Creative Technology," Proceedings of the Royal Society, Series A, Mathematical and Physical Sciences, 203, No. 1074 (October 1950), pp. 287-301.

18. Schutz, op. cit.

19. Far West Laboratory for Educational Research and Development, A Training in Educational Development, Dissemination, and Evaluation (Berkely, Calif.: FWLERD, March 1973).

20. Donald N. Frey and J. E. Goldman, "Applied Science and Manufacturing Technology," in Applied Science--Technological Progress (Washington, D.C.: National Academy of Sciences, June 1967); Arthur D. Hall, A Methodology for Systems Engineering (New York: D. Van Nostrand Co., 1962); and Frederick R. Kappel, "Systems Approach in Science-Based Industry" (Based on an address at the 13th International Management Congress, New York City, September 16, 1976).

21. Ames, op. cit.

22. Frey and Goldman, op. cit.

23. Amitai Etzioni, "An Earth-NASA: The Agency for Domestic Policy Development," Human Behavior, Vol. 5 (December 1976), p. 11.

24. Ibid.

25. Egon G. Guba, "Development, Diffusion and Evaluation," in Eiddell and Kitchel, op. cit., pp. 39-40.

26. Ibid., p. 40.

27. Edward M. Glaser and Thomas E. Backer, "Evaluating the Research Utilization Specialist," Rehabilitation Counseling Bulletin, Vol. 19 (December 1975), p. 388.

28. David L. Clark, "The Function of the U.S. Office of Education and State Departments of Education in the Dissemination and Implementation of Educational Research," in Dissemination and Implementation, ed. K. Goldhammer and S. Elam (Bloomington, Ind.: Phi Delta Kappa, 1962), pp. 105-127.

29. Joan H. Crisswell, "Research Utilization in Poverty Situations," Rehabilitation Record, March-April, 1969, pp. 7-11.

30. Communication, Dissemination and Utilization of Research Information in Rehabilitation Counseling, Proceedings of a Regional Conference Sponsored by the Department of Guidance and Psychological Services, Springfield

College, 1968, in collaboration with the Rehabilitation Services Administration, HEW. research grant no. Rd-2510-G, ed. C. R. Cooper and B. Archambault (Springfield, Mass.: Springfield College, 1968).

31. R. E. Crowe and R. S. Madancy, "The U.S. Environmental Agency's Experience in Technology Transfer" (Washington, D.C.: Office of Research and Development, U.S. Environmental Protection Agency, 1974).

32. Carter, op. cit.

33. Crowe and Madancy, op. cit.

34. Marta Wolf, "Concept of Information Services--Old and New," Contact, Vol. 2 (Spring-Summer 1976), pp. 8-9.

35. Research Utilization Inventory: A Survey of Current Research (New York: Research Utilization Unit, Community Council of Greater New York City, 1975-76).

36. National Science Foundation, Knowledge into Action: Improving the Nation's Use of the Social Sciences (Washington, D.C.: Government Printing Office, 1969), p. 21.

37. Maurice J. Eash, "Bringing Research Findings into Classroom Practice," Elementary School Journal, Vol. 8 (1968), pp. 410-18.

38. James L. Price, "Use of New Knowledge in Organizations, "Human Organization, Vol. 23 (Fall 1964), pp. 224-34.

39. Gerald Gordon and Sue Marquis, "Freedom, Visibility of Consequences and Scientific Innovation," American Journal of Sociology, Vol. 72 (September 1966), pp. 195-202.

40. Jack Rothman, Research and Development in the Human Services--Toward a Systematic Methodology of Applied Science (Ann Arbor, Mich.: Community Intervention Project, University of Michigan, 1977).

41. Rothman, Planning and Organizing, op. cit., p. 2-3.

42. Standard College Dictionary (New York: Harcourt, Brace and World, 1966).

43. Ibid.

IMPROVING THE QUALITY AND INCREASING THE PRODUCTIVITY OF SOCIAL WORK RESEARCH

by Dorothy Miller

If you can't do it,
Teach it....
If you can't teach it,
Research it....

The social welfare researcher is the lowest person on the field's totem pole. We are low-caste strangers in the social work profession. In my personal experience, social work researchers are perceived by most social workers as being cold, computer-like, intellectualizing neurotics and, as such, are far afield from what is "really going on" in the warm, human world of social work. On the other hand, social work researchers have a rough time rubbing shoulders with real social scientists--that is, sociologists, psychologists, psychiatric researchers, anthropologists, and economists. A DSW degree with a specialization in social welfare research is not something likely to get one admitted to any status circle, either inside or outside the field of social welfare. It is something like the old May and Nichols joke about the Jewish mother who shouts: "My son, the nurse!"

All of this is by way of introducing the barriers social work education must hurdle if it is to improve the quality and increase the productivity of research in this field. Status is the major problem.

Social status is as real as a rock because it represents power in a society. When society accords any social role a high status position, the desirability of, and the competition for that role explodes. When Sputnik first floated over our country, engineers were accorded savior status. When Watergate compelled our thoughts, newspaper reporters were thrust into a sacred status, and lawyers suddenly became respectable. Agronomists and geologists are on the status roller coaster for tomorrow as our natural resources fade.

However, no one has ever said (seriously), "When I grow up I want to become a social welfare researcher." Our social status is just below that of a hoochy-koochy dancer and just above that of a steam-laundry worker (to paraphrase H. L. Mencken). We are powerless and hence without social status and vice versa.

But social status is rooted in what other powerful forces and persons in our society define as roles which meet compelling social needs, whether those be the ability to kick a football straight for 40 yards or to do open-heart surgery. We honor those we need and grant them power to do that which we need to get done.

So who needs social welfare researchers? And where will they look for power, status, and employment? That is the larger issue that must first be examined in a paper such as this.

I, of course, would argue that society needs us, and needs us sorely. We know we need medical researchers to describe and trace the course of disease--but who researches why healing occurs? We know we need research on the economics of our social structure--but who reasearches the meaning of poverty to the children of the poor? We know we need research on the labor market--but who researches how people learn to value work?

I believe social welfare research is the most important and status-filled task in our society, and that we are standing in a long dark tunnel with a short burning match. What is to be done?

The logical answer would seem to be that in order to develop social welfare researchers, we should turn to one of society's most powerful status-conferring institutions--the university. If the university trains us and confers status upon us, then the place to begin is with graduate school education in social work. Most writers on this matter focus upon curriculum needs, and some argue that only when schools of social work give increased attention to the research curriculum will the field start improving its quantity and quality of research production. Others argue that social welfare research must be given a high priority in social work training, since it will aid us in becoming a more visible profession--that is, we will be in a better position to produce a valid "body of knowledge."

Despite these writers' urgings, the facts are that since 1968 there has been a progressive deemphasis of the research component in graduate school education.[1] In 1972 the Ad Hoc Survey Committee on Research in Graduate Curriculum of the Council on Social Work Education found that while most schools acclaimed the "research consumers" role, research production was given a high importance rating by only 9 percent of the graduate schools in social work. More than one-half of the schools no longer require a research project to be done by graduating MSW students. Zimbalist's study concluded that only about one-third of graduating MSW students produced a research project.[2] Hanks reported that only 4 of 69 schools require the completion of an undergraduate course in statistics and only 2 of the 69 require a research methods course for admission to graduate social work training.[3] Thus, as Kim has stated: "The social work research component has been moving toward the twilight zone in social work academia. If the trend continues, it may become little more than a 'professional token.'"[4] He concludes by suggesting the establishment of renewed research empha-

sis in schools' research curriculum--that is, research learning should comprise at least 20 percent of the curriculum, that the master's thesis be required, and that undergraduate research credits be one criterion for graduate school admission.

No one can quarrel with such a reasoned plan, given the findings about the diminished research manpower in our field. Then, why hasn't it been done? Indeed, we have diminished our research manpower production at the very time in history when social research and development is gaining in power and usage. Can this trend be reversed?

I would like to step back and present two different views of the field of social work. First, let us see social work as though it were a street-cleaning agency--whether it be a municipal department or a private business. Social workers are employees of that system, and as employees they are expected to keep the debris of society tidied up and out of the public's eye. That is, social workers are hired to practice--not to research--new ways of handling waste material, or new technologies for recycling waste, and so on. They are to sweep the streets. The schools of social work are vocational training ships for producing more street sweepers for street sweeping businesses. They wouldn't want to train anybody that couldn't be hired upon completion of that training. Therefore, to the degree this analogy holds, the curriculum of the school will be dictated by the labor market, not by the theorists.

If this cruel analogy were true even in part, it would lead us to look at the system interface between training and employment in social work to settle the "why don't we have more social work research training?" question. Do social agencies want social welfare researchers? Will they hire them? What will they have them do? What skills do they seek in their employees?

Kantrow reports that social agency executives were responsive to hiring social workers with research skills, that is, workers "with ability to identify problems in social work practice that could lead to research investigation." One-fourth of the agency executives stated that the ability to employ statistical techniques for the analysis of data was desired of beginning workers. They stated they would prefer to hire social workers in research positions in preference to sociologists or psychologists.[5]

But is some social work training in "statistics or research methods" equivalent to designing and carrying out scientific research? Are social agency executives naive about the characteristics of "research skills"? Perhaps social agencies will come to appreciate that social welfare research is a subspecialty requiring much more than a few courses in statistical methods as they work with evaluators and other social problem researchers. We must train social welfare researchers at the doctoral level. Will our schools of social work be ready with skilled doctoral graduates who can take their proper place vis à vis the research

needs of social agencies? It would appear there are miles to go.

Now, let's take an opposite view of the field of social work. Let's say that it is a profession, that it produces a body of knowledge, that it has skills of an independent specialization--in short, that it is a true profession and owns a turf. Social workers do what no one else can do. That is the view of Greenwood, of Hochwald and of many in the field.[6] If social workers were true professionals, they might be independent and largely self-employed, rendering their specialized services to those who sought them out. Private social work practice comes closest to this "professionalism" model. What is the value of social work research in such a profession? Who wants it? Who uses it? Who will do it?

I suppose I would like to opt for describing the field of social work today as being on the one hand a specialty without an independent supporting clientele, and on the other hand a vocation dependent upon established organizations for support in return for conformity of practice. The facts are that neither perspective is true, and neither perspective produces a job market for researchers. Neither hired hands nor independent entrepreneurs do research. Indeed, in all applied fields research is a subspecialty, not a pivotal primary practice. Medical researchers work for universities or pharmaceutical labs, legal researchers work in law schools or specialized research groups, and so on.

Is social welfare research fated to remain within the university and think tanks? Or do social agencies need social researchers? These two settings are the basic locations where social work researchers may acquire status, or indeed where they may find employment. It seems that both settings offer possibilities of utilizing social welfare researchers and their products.

Let us first examine the research needs of social agencies. Public agencies are finding it necessary to evaluate their on-going and innovative programs in order to justify their existence. Cost-effectiveness, accountability, and zero-based budgeting are all new and important concepts currently in social agency vocabularies. All require systematizing information systems, process monitoring, and program evaluation. Systems analysis and program evaluation are a definite growth industry. Potential social welfare researchers can expect to find new roles emerging within this evaluation industry. The pressure for new skills is there--now, perhaps, the schools of social work will begin to produce research and evaluation manpower of the doctoral level for social agency employment. At present, these jobs are being filled by psychologists and sociologists, and the "goodness of fit" problems produce more heat than light. To put it mildly, there often tends to be "a breakdown in communication" between the evaluator and the agency administration, so that little of value is produced. Certain structural barriers must be understood if evaluation is to be carried out successfully by social welfare researchers, although the social agency evaluation job market is opening up.

The greatest barrier may be the issue of who directs the research

itself. Social agencies want to control their own evaluation questions. The program administrators want to hire social welfare researchers who will answer those questions, not those who will develop their own research perspectives and questions. What are the social agencies' research needs in the area of program evaluation? For example, needs assessment studies are in great demand, but most agencies wish them to be tailored to fit the supply--that is, we must ask how much social service (as defined by that agency) is "needed," not whether alternative ways are available to meet those needs, or indeed if those "needs" really exist the way agencies have defined them.

Yet the first task in science is that of shaping the researchable issue, and that shaping inherently sets forth the research methodology and analysis which follows. No scientist worth his or her salt would work any other way. If the researchers are employees, it is not likely that they will be in a position to forge their own researchable question if it runs counter to the organizational or practice mission of the agency, or if it raises questions about that mission in the course of its evaluation. The dilemma is clear, and the resolutions are always emergent and always riddled with tension.

For evaluation research must be understood first as political activity, as Bernstein and Freeman so clearly detail in their important book, Academic and Entrepreneurial Research. As they state: "But even doing evaluation studies tailors thinking, shapes the style of program development, increases the influence of some persons and institutions, and decreases the power of others."[7] Clearly, evaluation research is too powerful to be left for long to the researcher who is but an employee of the agency that is conducting its own process and impact evaluation of its own programs. It appears that the social welfare researcher must become a private practitioner if evaluation work is to be possible in collaboration with social agencies. Otherwise, the researcher loses control of the evaluation methods and design, and may not be able to do scientific work.

Yet evaluation research is an essential activity for the field of social welfare. How can we develop the manpower, the methodological sophistication, the access, and the political power to carry out meaningful evaluation of the many social programs for which our profession bears the major responsibility?

Social programs will continue to require both process and impact evaluation in order to compete successfully for scarce funds. We must develop social work research manpower and methodologies to meet this need if many social programs are to stay in business.

Let us now examine social welfare research in an academic setting. Unlike social agency barriers to independent work, academic-based social research is an individuated enterprise, usually geared both to increasing funds for the school and the biobibliographies of the tenure-track professors and junior faculty. This

type of research tends to be an endeavor reduced in size and importance away from the "maddening crowd," safe from the politics of evaluative research, and geared to advancing academic careers and research interests. It tends to interface little, if at all, with other disciplines, with the research interests of social agencies, or with the needs of clients.

Since the school of social work is geared primarily to the teaching of social work skills, there is little institutional or financial support for cross-cutting studies regarding major questions in the field. Rather, faculty members must hustle their own research grants and juggle their extramural research efforts (if any) in addition to their teaching role. Further, some social welfare faculty have not had training in the newer and more sophisticated methodologies of social research, if indeed, they ever had significant research training at all. They may be "rusty" at best, and while they may teach research methods courses, they may not have designed and carried out a major social research project in recent time. Many received whatever research training they do have in disciplines other than social welfare--usually in experimental psychology or sociology. The transfer of these out-discipline concepts and methodologies to the research issues inherent in developing practice theory or in the generic field of social welfare is by no means a simple matter. Since most faculty do not now work closely with graduate students doing thesis research, their meager research skills may erode even further.

The fact is that newer research methodologies such as field methods, ethnomethodology, participant-observations, multivariate analyses, cluster analysis, path analysis, and newer use of computers and programs hold much promise for tooling up social welfare research to tackle major issues such as the intercorrelations between bureaucratic structures, helping strategies, and client outcomes. These methodologies also hold promise for examining the impact of well-meaning social programs upon target populations culturally distant from the programs' aims or the program workers' values. In fact, what Hamovitch observed in 1962 remains true in 1977: "[Social workers in research are] fumbling with inadequate tools...inadequate theories...a certain notion that every case is unique...and our professional journals have inundated us with descriptions of single cases, leading us to generalizations without adequate evidence..."[8]

So until we social welfare researchers retrain, retool, and begin to conceptualize and theorize, our research will remain primitive at best and irrelevant at worst. Our research teaching will fail to challenge students to the vast opportunities in the field, opportunities so compelling and exciting that we need to generate a whole cadre of research specialists armed with new technologies and brave hopes.

But more than anything else, we need to conceptualize the major issues in our field and to design and conduct research that

will address those issues. For example, what is the nature of poverty and what strategies can be developed to mitigate its crushing impact upon the lives of the poor? When we are competent to do this, then we will meet a societal need and status will come to our role and our days as low-caste strangers will end.

I began this paper by repeating the student joke about research competency. I would like to close with a paraphrase of that little piece of wisdom: "If you can't research it, you can't teach it; if you can't teach it, you can't do it."

Thus it is my contention that we need to reeducate our social agencies, retool our faculties, revamp our research strategies, reconceptualize the major social research issues--in short, we need to get to work! The agencies need us, the other social scientists need us, and the governmental agencies will fund us. Our research perspectives can be fresh and vital, rooted as they are in our awareness of social and psychological dynamics and of the breath of human misery. Perhaps if we work hard and wisely, even "clients" may eventually benefit from our increased quality and quantity of meaningful and relevant social research, which focuses upon the betterment of the human condition.

We must become "born-again" social welfare researchers!

NOTES

1. Paul K. H. Kim, "Research Way to the Remedy for a Professional Dilemma in Social Work," Arete, Vol. 4 (Spring 1977).

2. Sidney E. Zimbalist, "The Research Component of the Master's Degree Curriculum in Social Work: A Survey Summary," Journal of Education for Social Work, Vol. 10 (Winter 1974), pp. 118-23.

3. John W. Hanks, "Graduate School Admission Requirements," Social Work Education Reporter, Vol. 21 (December-January 1973), pp. 51-53.

4. Kim, op. cit., p. 143.

5. Ruth Kantrow, "Innovations in the Research Sequence," Social Work Education Reporter, Vol. 17 (March 1969), pp. 43-46, 60-61.

6. Ernest Greenwood, "Attributes of a Profession," Social Work, Vol. 2 (July 1957), pp. 45-55; and Hilde L. Hochwald, "The Function of Social Work Research," in Research Programs and Projects in Social Work (New York: Family Service Association of America, 1952).

7. Ilene N. Bernstein and Howard E. Freeman, Academic and Entrepreneurial

Research (New York: Russel Sage Foundation, 1975), p. x.

8. Maurice Hamovitch, "Epidemiology--Its Application for Social Work," in Public Health Concepts in Social Work Education (New York: Council on Social Work Education, 1962), pp. 99-100.

PART IV

INCORPORATING RESEARCH INTO PRACTICE IN SOCIAL WORK EDUCATION

INCORPORATING RESEARCH INTO MACRO SOCIAL WORK PRACTICE AND EDUCATION

by Irwin Epstein and Tony Tripodi

Macro social work practice involves initiating, implementing, and assessing service and social action policies, programs, and organizations.[1] Effective and efficient practice at this level requires valid and reliable information. Social research is one way of getting it. Generally, macro social work practitioners have relied on research consultants to conduct research and to provide this information. However, for several reasons this strategy frequently is very costly and often does not serve practice needs.

First, a considerable amount of time is almost always required to acquaint the consultant with program policies, means, and objectives. Second, line staff often present obstacles to the consultant's entry into a program and to data gathering. Third, the consultants' research orientation is often incompatible with information requirements, financial resources, or practice orientations of line workers. Fourth, consultants frequently propose rigid, experimental research designs that require the denial of service to a control population, which is ethically and professionally unacceptable to practitioners and, for obvious reasons, objectionable to client advocates. Finally, information feedback from the consultant is often too slow, and when it comes is frequently couched in language that is not directly applicable to policy formulation or to programmatic and organizational decision making. The foregoing problems suggest the need for a reconceptualization of the relationship between macro social work practice and research.

The purpose of this paper is to address the following questions: What are the special information requirements of macro-level practice? How can research concepts and techniques be utilized by community organizers, program planners, program administrators, and policy analysts in developing, monitoring, and modifying social programs? What modifications in research models and macro-level practice teaching are needed to increase relevant research production and utilization?

In an attempt to answer these questions, macro social work practice is conceptualized in terms of "stages" of practice and the information requirements of each of these stages.[2] We then show how some very simple and basic research concepts and techniques can be used by macro-level practitioners to provide this information.[3] We conclude with a brief discussion of strategies for

introducing these approaches into practice teaching.

The paper rests on three assumptions. First, we assume that macro social work practice can and should routinely employ research.[4] In other words, it should be research-based. This is only possible, however, if research concepts and techniques can be made more accessible to practitioners than they presently are. Hopefully, this paper is a step in that direction. Second, we assume that research is not an end-in-itself and that it only will be used by social workers if findings can be tied directly to practice decisions. Our third assumption is that present and future practitioners will employ these techniques in the best service and social change traditions of social work--not simply for organizational maintenance or aggrandizement. In any case, greater familiarity with the practical limitations and utility of these concepts and techniques at all levels of practice will increase the accountability of outside research consultants or inside research staff to a more sophisticated set of practitioner-consumers.

Practice Stages, Information Requirements, and Research Techniques

Earlier we described macro social work practice as involving the initiation, implementation, and assessment of policies, programs, and organizations. This form of practice can focus on anything from a single policy within a single program or organization to multiple policies across a number of comparable programs or organizations. Its auspices can be the program or organization itself, an outside funding source, a coordinating agency, a professional association, a consumer advocate group, or an organization of current, potential, or dissatisfied clients. Its purpose can be the development, expansion, stabilization, modification, or dismantling of a program or organization. It is practiced by social workers trained in community organization, social planning, social welfare administration, and social policy analysis.

Those trained in community organization and social planning probably are primarily engaged in initiation activities. Those trained in administration are most heavily engaged in program and policy implementation. Those trained in policy analysis are frequently involved in policy and program assessment. However, to some degree all these forms of practice involve all three practice stages. Thus if they are to be effective, community organizers and social planners must consider problems of program and policy implementation and assess the impact of their efforts. Likewise, social welfare administrators must deal with the problems of securing resources for program initiation and increasingly are required to engage in program evaluation. Finally, policy analysts must go beyond a narrow concern with assessment and consider problems of introducing and implementing policy.

Irrespective of the level or location of practice, the practitioner's auspices, the purpose of intervention, or the type of training received, conceptualization of practice stages facilitates

our identification of information requirements and the research techniques that are most likely to fulfill these requirements. Accordingly, the research function most supportive of effective initiation activities is planning research. Monitoring research contributes most directly to effective implementation. Finally, evaluation research promotes systematic and valid assessment. Each of these modes of social research can make a significant contribution to effective and efficient performance within each practice stage.[5]

Information Requirements of Initiation

In their broadest sense, community organization and social planning are processes by which society addresses social problems. Frequently these processes involve initiating new organizations, new programs, new policies, and new resource generation activities. More narrowly, these functions take place within existing social agencies, with established technologies, policies, and procedures, and with committed sources of funding.

Despite these differences, the community organization and program planning function require that macro-level practitioners have access to reliable and valid information concerning (1) the potential target population, its characteristics and needs; (2) already existing programs; (3) available intervention strategies, technologies, or services and their relative effectiveness and efficiency in meeting the needs of the target population; and (4) the extent to which organizational participants have the capacity and motivation to implement proposed program interventions.

The need for such information persists throughout the life of program or organization, so that planning is closely related to monitoring and evaluation. By monitoring and evaluating developing programs and organizations, we can determine the extent to which policies and strategies are being implemented, whether programs or organizations are serving the needs to which they were originally addressed, and if the need persists. Judgments also can be made about the relation between a given program or organization and changing patterns of service and organization within a community raising questions about interagency coordination of services or organizing efforts. As techniques of intervention and service delivery evolve, practitioners will want to keep abreast of these changes and make appropriate modifications in the social units to which they address their practice. Finally, judgments about the individual and collective competencies and commitments of existing agency staff or organizational participants must be made continually. Thus, although the information generated by planning research is most critical during initiation, a continuous process of feedback of this kind of information is highly desirable.

Techniques of Planning Research

Techniques of planning research can be employed usefully to

satisfy many of the information requirements of initiation. Questionnaires, in the form of "needs surveys" are useful for securing information from potential clients or membership, practicing professionals, and other concerned people about the target population's needs, its use of existing programs, its membership in existing organizations, and the kinds of services, activities, or incentives to which it is likely to respond. Questionnaires are useful as well for determining the success or failure of existing programs or organizations dealing with a particular problem or population group. This information can be very helpful in coordinating efforts of existing programs and in selecting intervention strategies. A questionnaire also may be administered to agency staff or to organizational membership to assess their competencies and interest in performing newly proposed tasks.

The research interview, like the questionnaire, is a powerful and versatile technique for generating valid and reliable information relevant to many aspects of macro-level practice. In program initiation, "resource survey" interviews may be employed to gather information about those services or programs that currently exist within a community, consumer satisfaction with these services or programs, practitioners' advice about most effective intervention techniques and needs for new services, and so on. This information facilitates coordination and discourages the duplication of unnecessary or ineffective services or programs.

The intelligent consumption of research is a skill that is increasingly demanded of macro-level practitioners. This activity involves reading, interpreting, and evaluating information from empirical studies. Research reports may take the form of published studies in books and professional journals, unpublished studies conducted by other social agencies, background research for legislative proposals, or "in-house" studies conducted within a program itself.

In performing initiation activities, one must be able to consume critically the kinds of needs and resource surveys mentioned above. In so doing, one can make informed decisions about planning new programs and organizations that are nonredundant and relevant to community needs. Moreover, appraisal of the research literature should precede the selection of intervention strategies. Although we recognize that the choice of intervention is affected by many different factors--for example, funding opportunities, agency traditions, staff competencies, community values and norms, and so on on--we propose the maximal use of available empirical evidence in the decision-making process. This kind of organizational rationality is extremely important because the choice of intervention will determine how well and at what cost consumers will be served. Thus it is vital that planning involve the assessment of whatever empirical evidence is available before choosing from among policy alternatives and intervention strategies.

Observational research concepts and techniques also are useful in all aspects of macro-level practice. They are most useful when

more obtrusive research techniques, such as questionnaires or interviews, are not appropriate. For example, in situations in which research subjects are unable to recall events, are uninterested, or are untrained in the concepts or dynamics with which the practitioner is concerned, observational techniques can be applied usefully. In program initiation, for instance, groups of potential service recipients or program participants can be observed in their natural settings--for example, family, work, community, recreation--as a way of diagnosing individual, group, or community problems and planning the kinds of interventions required.

Information Requirements of Implementation

Monitoring research is the process by which information about program or organizational operations is generated and analyzed. It tells the practitioner how well programmatic means and organizing strategies are being implemented. More specifically, monitoring research provides information about the extent to which: (1) the designated target population is being reached, served, and/or engaged; (2) the quantity and quality of staff performance or membership activity is satisfactory and consistent with program and organizational goals and technologies; and (3) programmatic and organizational policies comply with predesignated standards, laws, and regulations imposed by external funding sources, regulatory agencies, professional bodies, community groups, and the like.

Monitoring takes place after initiation objectives have been approximated. Once goals have been specified, target populations identified, intervention strategies chosen, and staff recruited and trained, the monitoring function can begin. It starts with the delineation of performance or activity standards for staff or organizational members that are consistent with initiation objectives. Next it requires the systematic collection of information on staff performance or membership activity based on these standards. When this information has been collected, a judgment is made about the extent to which discrepancies exist between actual performance and organizational expectancies. A decision then can be made about whether program operations or organizing activities should be fundamentally changed, modified, or remain the same.

A secondary use of monitoring research is for public relations and for reporting program or organizational activities to sponsors. Indeed, the format of information to be collected routinely may be determined by requirements of funding sources or regulatory agencies. This information may then become the basis for annual reports, public relations literature, and so on.

Monitoring and the information it generates also are useful in areas in which it is difficult to get direct measures of program or organizational effectiveness. For example, in the process of evaluating a state mental health facility it may be impossible to get direct measures of the success of rehabilitation efforts.

However, it would be helpful to know how much time patients spend per week in rehabilitation or therapy programs and how this compares with norms for similar state institutions and legal standards imposed by the state.

Monitoring Research Techniques

The specific research techniques discussed in the context of planning research can be adopted readily to monitoring research. Thus, for example, questionnaires frequently are used to gain information about how staff is allocating its efforts. Another use of questionnaires in program monitoring is in the form of "service-utilization surveys," which are conducted to determine the extent to which potential clients are cognizant of and actually use service programs available to them. "Eligibility surveys," among other things, determine whether those who are being served meet eligibility requirements established by funding sources or regulatory agencies.

Along similar lines, interviews can be adopted to generate implementation information. Thus staff may be interviewed to gain information about organizational obstacles to effective performance. Similarly, uninvolved community residents may be interviewed to determine whether community organizers have contacted them, and their perceptions of this contact. This information would be useful in determining how organizers are spending their time, whether they are implementing the strategies that the organization considers most appropriate and, if they are, what it is about their approach that is successfully or unsuccessfully engaging community residents.

In monitoring, macro-level practitioners should be able to read, interpret and evaluate intelligently the kinds of "in-house" studies mentioned above. In addition, they should be able to consume effectively practice literature that describes the implementation of intervention strategies, in order to determine whether the operationalization of intervention strategies within their own organizations or programs are consistent with the latest developments in practice knowledge.

Observational techniques also can be employed to monitor staff performance and membership activities. As we indicated earlier, these "unobtrusive" techniques can be most useful when other social research techniques would interfere with the natural process of intervention.

Although it is not generally considered a "research technique," forms can be used to monitor service delivery to various client groups, staff performance, and client response to staff activities. Good forms make use of concepts and principles that are basic to all research instruments. In the implementation stage, they are most useful for conducting a client census. Such a census offers a quantitative description of program contacts with clientele and

makes possible comparison of this information with standards related to overall program objectives. In addition, forms can be used to conduct "time and activity" studies of staff performance. As a result of such a study, adjustments can be made in staff assignments, allocation of staff resources, and so on.

Finally, simple sampling techniques may be used in connection with questionnaires, interviews, systematic observations, or time and activity data to monitor staff performance.[6] For example, if staff time and activity data are too copious for complete analysis, a representative sample of these data can be analyzed to reveal the proportion of staff time spent in various activities. If one wanted to determine whether foster care workers were making foster home visits as frequently as they were required to by agency standards, it would not be necessary to contact every foster home. A representative sample would suffice.

Information Requirements of Assessment

Evaluation research is the process by which programmatic or organizational effectiveness and efficiency are assessed systematically. It involves the collection, analysis, and interpretation of data bearing on the achievement of goals, on organizational impact, and on policy outcomes. By contrast, monitoring only tells us whether interventions follow specifications. For example, monitoring tells us whether a tutorial reading program for bilingual, bicultural children has sufficient staff and technical resources, has successfully recruited the designated target population, and is faithfully implementing the program's strategy for teaching reading skills. Evaluation tells us whether the children who participated in the program did, in fact, improve their reading skills (effectiveness) and at what cost (efficiency).

Effectiveness considers questions such as: how successful a vocational rehabilitation program has been in securing and sustaining job placements for program clientele; how successful a welfare right's group has been in securing desired services and financial benefits for its members; how successful a community coordination council has been in coordinating social services within a given community and in reducing unnecessary duplication of services; how successful a new child-abuse law has been in reducing the incidence of child abuse, and so on.

Efficiency is concerned with the costs, in time, money, staff resources, and so on of achieving these goals. In other words, efficiency is the ratio of effectiveness to effort. This concept makes possible the evaluation of the relative costs of different intervention strategies to achieve the same goal. As such it is extremely useful in making decisions when resources are scarce. Assessment requires valid and reliable information about all these questions.

Evaluation research can provide information that is meant to be

generalized to other comparable programs or organizations. This kind of evaluation research is referred to as summative evaluation. Alternatively, evaluation research that is mainly concerned with assessing and improving a specific policy, program, or organization without regard to the generalizability of the findings, is called formative evaluation.[7]

To conduct a summative evaluation, a "classical experimental model" is typically employed. This model is very costly and usually requires research and statistical consultation. It also raises many technical, practical, and ethical problems for staff. Not surprisingly, however, research consultants generally recommend summative evaluation designs.

Formative evaluations do not generate knowledge that can be easily applied to other settings. Typically, they make possible inferences that are only suggestive of cause-effect relationships because they do not routinely employ control groups or random allocation of subjects. Knowledge about the relationship between intervention and outcomes thus is purely "correlational." The major advantages of formative evaluations are that they are less costly, require less expertise, present fewer practical and ethical problems, and provide more immediate feedback of results than do summative evaluations. The information generated by formative evaluation research can provide the macro-level practitioner with the data necessary for decisions about the expansion, contraction, and/or modification of existing policies, programs or organizations. Such information provides a rational basis for decisions about service delivery, staff allocation, intervention strategies, budget priorities, and so on.

Evaluation Research Techniques

By combining the methods of data gathering discussed earlier with formative evaluation designs, it is possible for macro social work practitioners to conduct evaluations with minimal reliance on research consultation or permanent research staff. Thus, for example, "interrupted time-series designs" can be combined with data collected through the use of forms, observational techniques, questionnaires, or interviews to provide correlational information about program interventions and outcomes. Combined with interview or questionnaire data, "replicated cross-sectional survey designs" can provide almost immediate feedback of information about the effects and efficiency of client processing in continuous programs in which clients move through a predictable set of statuses. "Comparative designs" may be used to compare two or more organizing strategies and for making judgments about their relative effectiveness and efficiency. Finally, "crossover designs" can be used in evaluating programs that have large numbers of applicants, long waiting lists, and limited program vacancies and that involve a relatively short period of contact with clientele.

Moreover, the concept of "differential evaluation" can be

employed to evaluate the staff effort, effectiveness and efficiency of initiation and implementation activities, as well as ultimate outcomes.[8] This notion, which combines the use of multiple data-gathering devices with knowledge about stages of organizational development, seems particularly promising for macro social work practitioners.

Facilitating Utilization and Improving Training

Until research-based practice models for macro-level social work evolve, there are a number of strategies that can facilitate a productive interchange between research and practice. These fall into two main categories: the conduct of practice-related research, and the conduct of research utilization activities.[9]

Practice-related research is research planned to be relevant for practice. Within this category is included "experimental social innovation." This strategy involves the use of experimental methods for testing policy or practice alternatives specified by policy developers and administrators. Another promising mode of practice-related research is the "research development, training, and evaluation" (RDTE) model. This model focuses research on several aspects of practice. The research is conceived and executed by a team of researchers and practitioners. Those aspects of practice that gain empirical support are described so that they can be used for training purposes. Finally, the project staff develops a training program that is implemented and evaluated.

A related approach is the "utilization, research, and development," (URD) model. The primary difference between RDTE and URD is in the formulation of hypotheses for research. While RDTE formulates hypotheses that may be based on knowledge from previous research studies, it is not dependent on a systematic review of the research literature for the articulation of these hypotheses. In contrast, URD is predicated on a relatively thorough analysis of the available research literature.

A fourth strategy of practice-related research involves both practitioners and researchers in case studies of new practice modalities. This "case study approach" attempts to systematize experiences in developing practice interventions, and to formulate hypotheses for research. It is especially useful when practitioners do not have well-developed theories or practical guidelines for conducting their work.

Ultimately, macro-level social workers will determine whether social research concepts and techniques will be incorporated into their practice. This possibility is likely to be enhanced by the development of support structures within social agencies, schools, and professional associations for the process of research utilization. Working committees can be organized to review research knowledge in given practice areas, and staff can be provided with time, resources, and access to research consultation or research

workshops through continuing education programs. Schools of social work can promote utilization by encouraging and rewarding faculty who engage in these efforts, by offering courses on the use of research concepts and techniques in macro social work practice, and by sponsoring conferences, workshops, and extension courses in this area. The publication of two new journals, the Journal of Social Service Research and Administration in Social Work are likely to make contributions to research utilization in macro social work practice.

Finally, the research utilization skills of social work students can be developed by seminars, classes, and research utilization field placements. Specific courses in planning research, program monitoring, and program evaluation can teach macro social work practitioners to utilize more effectively the research literature, research consultants, and research techniques in their future practice.

NOTES

1. Much of this paper is based on materials contained within the authors' recently completed books. See Tony Tripodi, Phillip Fellin, and Irwin Epstein, Differential Social Program Evaluation: Guidelines for Health, Education, and Welfare Administrators (Itasca, Ill.: F. E. Peacock Publishers, forthcoming); Irwin Epstein and Tony Tripodi, Research Techniques for Program Planning, Monitoring, and Evaluation (New York: Columbia University Press, 1977); and Tony Tripodi, Uses and Abuses of Social Research in Social Work (New York: Columbia University Press, 1974).

2. For a recent and somewhat similar formulation of a stage approach to administrative practice, see R. Patti, "Developmental Administration: Toward a Paradigm of Management Practice in Social Welfare Programs" (Paper presented at the Conference on Issues in the Administration of Human Service Organizations, Racine, Wisconsin, June 1977).

3. For a more complete discussion of the utilization of these techniques, see Epstein and Tripodi, op. cit.

4. We do not mean to imply that all aspects of macro social work practice can be research-based. This would be impractical and unrealistic. However, there are many areas in which practitioners rely on "intuition," gossip, habit, and tradition rather than systematically derived empirical information for critical aspects of decision making. We are simply suggesting that the latter be maximized.

5. We are presenting research techniques as they relate to practice as a heuristic device. In fact, a single research effort can contribute to various stages of practice. Thus, for example, Weissman reports on the use of a "management information system" in a settlement house which is

used for monitoring staff efforts, evaluation, and planning future interventions. See H. Weissman, "Clients, Staff, and Researchers: Their Role in Management Information Systems," Administration in Social Work, Vol. 1 (Spring 1977), pp. 43-51.

6. Naturally, sampling concepts and techniques can be and have been usefully employed in planning and evaluation research as well. However, their potential for use in program monitoring has not been exploited. For a discussion of the applicability of sampling to program monitoring, see Epstein and Tripodi, op. cit., Chapter 8.

7. For a more detailed discussion of the distinction between summative and formative evaluation, see M. Scriven, "The Methodology of Evaluation," in Perspectives in Curriculum Evaluation, AERA Monograph Series on Curriculum Evaluation, no. 1, ed. R. W. Tyler, R. M. Gagne, and M. Scriven (Chicago: Rand McNally, 1967), pp. 39-83.

8. For a full elaboration of "differential evaluation," see Tripodi, Fellin, and Epstein, op. cit., Chapter 5.

9. For a more extensive discussion of practice-related research and research utilization activities, see Tripodi, op. cit., Chapter 6.

INCORPORATING RESEARCH INTO EDUCATION FOR CLINICAL PRACTICE IN SOCIAL WORK: TOWARD A CLINICAL SCIENCE IN SOCIAL WORK

by Scott Briar

One of the more striking paradoxes in social work is that although it is predominantly a profession of clinicians, and although it has long claimed to be one of the scientifically based professions, it has not produced more than a handful of clinical scientists. Social work stands in sharp contrast, in that respect, to psychiatry and clinical psychology, both of which have significant numbers of clinical scientists. And in recent years a number of schools of nursing across the country have established programs designed to train clinical scientists for that profession. Social work has produced a number of gifted practice theorists, but that is not the same thing.

What this paper will suggest is that the lack of clinical scientists in social work is related to the failure to integrate research successfully and effectively into the education of clinical practitioners and that the development of more effective educational solutions will need to incorporate the concept of clinical scientists into social work education.

This parodoxical gap has many possible explanations. But before turning to any of those or to consideration of what, if anything, should be done to correct the deficiency, it may be helpful to explain what a clinical scientist is.

The Clinical Scientist

What is meant by "clinical scientist" in this paper is a direct service practitioner who:

1. Uses with his or her clients the practice methods and techniques that are known empirically to be most effective.
2. Continuously and rigorously evaluates her or his own practice.
3. Participates in the discovery, testing, and reporting of more effective ways of helping clients.
4. Uses untested, unvalidated practice methods and techniques cautiously and only with adequate control, evaluation, and attention to client rights.

5. Communicates the results of his or her evaluations of practice to others.

In discussing these attributes with many practitioners, I have found that they do not regard the clinical scientist concept as alien to their own image of social work practice (even though many practitioners tend to be ambivalent about research). On the contrary, the initial reaction of many practitioners is that social workers already do, or at least are committed to do the things listed above as the distinctive attributes of clinical scientists. Such reactions are hardly surprising, since the characteristics of the clinical scientist are not unlike what social workers are taught should be their commitment to a scientific approach. However, any belief that social workers already do these things, or even are prepared to do them, quickly evaporates when these attributes are compared more closely with the actual behavior of social work practitioners. A few examples of such comparisons for each of the attributes will suffice to illustrate the operational meaning of the concept.

To begin with the first characteristic of the clinical scientist, to what extent do social work practitioners make an effort to use practice methods and techniques of empirically tested effectiveness? The indications are that relatively few practitioners make such efforts. For example, in order to know what tested results have been reported, it obviously is necessary to follow the research literature on practice. But it has been shown that most practitioners regard research literature as the last place they would look for answers to practice questions, and many say they would never look there.[1] Another example is the continued refusal of many practitioners even to consider using some of the highly successful, carefully tested methods and techniques that have been reported by behaviorally oriented practitioners, even in those instances where the superior effectiveness of some of these procedures has been replicated repeatedly.

Second, to what extent do social work practitioners engage in continuous, rigorous evaluation of their own practice? For example, one of the elementary components of evaluation is post-treatment follow-up. Even though I am unaware of any systematic surveys on the subject, my guess is that most social work practitioners do not routinely follow up the progress of their cases. Moreover, when we began a few years ago to have direct service students use clinical research methods in their field practice, we found that some agencies did not want to allow the students to follow up their cases.

Third, to what extent do social work practitioners participate in the discovery and testing of more effective practice methods and techniques? Perhaps the most telling illustration here is the persistent lament from researchers about the difficulties they encounter in securing practitioner participation in research projects. Of course, many practitioners do participate to the extent of generating data for studies, but their responses often are less than enthusiastic.

Fourth, to what extent do social work practitioners use untested methods and techniques only with appropriate control, evaluation, and attention to client rights? My impression is that few social workers ever say to a client: "What I will do to try to help you is an untested and therefore still experimental approach. I believe it will be helpful, but there is no scientific evidence to indicate that it is, and I do not know whether there are any undesirable side effects." On the contrary, many social work practitioners make constant use of methods that have not been tested, and moreover, often act as if the validity of these methods is well-established. One example, among an awesome number that could be mentioned, is the Satir approach to family therapy that has been in widespread use for over 15 years, although systematic, empirical evidence about its effectiveness still remains to be presented.

Fifth, to what extent do social work practitioners communicate the results of their work to others? In the years that I served as editor-in-chief of Social Work, one of our greatest frustrations was the lack of articles submitted for publication by practitioners. The journal often was accused of being biased in favor of articles submitted by academicians, but the real reason for the high proportion of academicians among the published authors was the lack of articles submitted by practitioners.

The above illustrations--which could be elaborated extensively--indicate that the number of social work practitioners who possess these attributes--in other words, the number of clinical scientists in social work--is extremely small, despite the apparently widespread belief in the desirability of these qualities for practitioners.

There is no intention here to suggest or even imply that all social work practitioners should be clinical scientists--only that some should be. Specifically, any agency that employs more than a few social workers engaged in direct practice should have one clinical scientist. There should be concentrations of clinical scientists in, or connected with schools of social work, and some students should be trained for this role.

Benefits of Clinical Scientists

What would be the expected benefits of more clinical scientists in social work? Or, to put it more bluntly, who needs them?

First, the clients of social workers need them. Clients have a right to expect that the social workers from whom they seek help: (1) will be knowledgeable about the relative effectiveness of the available methods and techniques for helping them, (2) will use the most effective methods, and (3) will accurately inform them about what can be expected from the worker's interventions.

Second, clinical scientists need to meet the demands from the public for proof of our effectiveness or, at least, indications that

we are making efforts to increase our effectiveness. The emergence of practitioner-scientists in social work would, in itself, be a strong, positive demonstration of the profession's commitment to develop more effective methods.

The development of clinical scientists also could be expected to have a number of more specific benefits for the profession. Two of these benefits are particularly pertinent to this discussion. First, establishment of systematic, clinical research activity in social work--even on a small scale--would accelerate the development of tested knowledge that can be applied directly in practice. The kinds of studies that thus far have dominated research on social work practice--perhaps exemplified best by Girls at Vocational High[2]--have been relatively large-scale projects requiring a substantial investment of professional research staff and related resources. Such studies take a long time, can be conducted only infrequently because of the heavy investment required, and whatever knowledge they generate, by virtue of their design they tend not to generate findings that have immediate, direct utility for practitioners.

In contrast, programs of clinical research could be conducted with a relatively small investment of resources by clinicians themselves. Moreover, the nature of clinical research is more likely to produce findings that are directly utilizable by practitioners. A second specific benefit is that encouragment of clinical scientists in social work is likely to lead to the development of models and methods for the continuous, empirical evaluation of practice that could be incorporated into the routine practice of social work clinicians generally. This benefit is suggested by our experience in teaching clinical research methods to our students.

Preparation of Clinical Scientists

Assuming that it may be desirable to have more clinical scientists in social work, a next question is what is required to prepare and develop them? Before describing the approach we have taken to that at the University of Washington, it will be useful to identify the necessary conditions and requirements for clinical scientists, since these must be satisfied both in their educational preparation and in their subsequent work.

The requirements for clinical scientists are as follows:

1. Clinical scientists in social work need to be practitioners first of all. That is to say, practitioner-scientists should have adequate, and preferably superior training and skill in direct practice. One obstacle to meeting this requirement is the still widespread but completely fallacious belief that it is impossible for the same person to be a good practitioner and a good researcher. There are a variety of reasons for this requirement, many of them obvious, but an especially important one is that

the credibility of a piece of clinical research, in the eyes of other practitioners, is affected by the perceived practice competence of the person who conducts it.

2. The practitioner-scientist should have a thorough knowledge of the literature and research on social work practice. It is important that such practitioners be familiar with what has been done before as well as with the current issues and questions.

3. Students preparing for the clinical scientist role must have the capacity to practice in the face of uncertainity. Absolute, unconditional faith in the efficacy of a particular approach is not compatible with the attitude required to evaluate that method. There is, of course, a view held by some social workers that faith in the practice approach one is using is a necessary condition for effectiveness, and conversely that doubts about the efficacy of the practice methods one uses increases the likelihood that outcomes will be unsuccessful. I am unaware of any systematic evidence that supports this view, and my own experience suggests that it is not true.

4. The clinical scientist in social work needs to have an understanding of the logic and methodology of science and detailed knowledge and competence in the application of the developing methodology of single-subject designs.3

5. One of the more difficult requirements for many practitioners to meet is skill in translating and expressing service objectives and interventions in observable, measurable terms. This skill can, however, be acquired and is a necessary condition for use of single-subject design methodologies.

Practitioner-scientists should acquire a reasonably clear sense of research practices, especially the centrality of outcome and effectiveness questions. The intervention process has many fascinating aspects, and it is easy to be drawn into the study of intrinsically interesting questions which, however, may have no bearing on effectiveness.

7. Clinical scientists also should assume a commitment to the development of research and evaluative methodologies and tools that can be incorporated into the routine practice of social workers. Some components of typical single-subject design methodologies, such as baselining and monitoring, have been incorporated into routine practice by some social workers who find them useful in their practice, apart from their usefulness for research purposes.

8. Another essential requirement is that clinical scientists disseminate the results of their work--negative as well

as positive--as widely as possible.

9. Finally, the practice of clinical research imposes certain requirements on the practice environment, requirements that must be satisfied if clinical research is to develop. One of these requirements is time. A clinical researcher in an agency, for example, would need to carry a smaller caseload than other workers, because the amount of time devoted to each case would be substantially greater. Second, the research practitioner would need greater freedom to select cases for research purposes, especially since replication is a frequently used tool in clinical research. And third, an environment that accepts and even encourages experimentation and research is essential. Some of our students reported that agency colleagues viewed them with suspicion simply because they were making graphs of the behavior of their clients over time. Such practices are commonplace of course, in medical settings, but the attitude toward research procedures in many social agencies is mixed and can inhibit clinical research. As this example makes clear, this requirement and the previous ones as well are not the responsibility of schools and educators alone--they extend into the profession and into agencies. In fact it is our experience that unless these requirements are addressed, our best educational efforts to prepare and encourage students to engage in clinical research, even of the most modest kind, can be blunted following training because these requirements and conditions are not present where the former student is practicing. This problem may be more clear after the following brief overview of how we have approached the objective of training students for clinical research at the University of Washington.

A Case History

Four years ago a colleague and I took one section of a two-quarter required research course, and on an experimental basis set out to teach the methods and techniques of clinical research, within the clinical scientist model. We relied heavily on the single-subject design--which was just emerging in our field at the time--as the primary research model, which we elaborated into a research-practice model. By "research-practice," I mean a model that can be incorporated into practice routinely without altering the social worker's normal or preferred mode of practice. Since we also wanted the students to conduct clinical research on their cases in the field, we were in communication with the students' field instructors. Those students enrolled in our section of the course were self-selected volunteers.

Evaluated against general criteria, the course appeared to have been relatively successful, but one of the most important outcomes was

unexpected. By about the sixth or seventh week of the class we found that we could no longer maintain a distinct and clear separation between research and practice. As students began to apply what they were learning in the field, they not only incorporated the research-practice model into their practice, but research and practice became fused and we found that when we addressed research we also were talking about practice and vice versa. It is difficult to illustrate fully this point without lengthy examples.

For instance, in order to consider how to measure a potential intervention target--either for baseline or monitoring purposes--it turned out to be necessary to examine how that, or any target was selected, how it should be specified for a particular client, how to measure it in the intervention process, what kind and direction of change in this target was desired, what interventions were to be used, and so on to a host of questions that were directly pertinent to the research task but also were simultaneously practice questions. Since both of us were qualified to teach practice courses, we responded to these realities as best we could, but we lacked the time to be as effective as would have been desirable.

A year later we made some major changes in the course based on our experience the first year. First, we assumed responsibility for one section of a two-quarter direct practice course and combined that with the section of the required research course to create a two-quarter practice-research course that was the equivalent, in time and credit, to two courses. Second, we selected several fieldwork sites that were supportive of the model we were teaching, and were agreeable to our plan that we would supervise one of the student's cases (the student's "research case") in the classroom. Incidentally, this combination of practice, clinical research, and selected field sites into one unit has come to be called "educational units." The seminar met twice a week for a total of four to five hours. For most of the two quarters, one of the weekly sessions was used as a continuous case conference to review and provide detailed consultation to the students on their "research cases"; the field instructors were invited to these conferences, as well as to any other part of the course they wanted to attend.

This course attracted the interest of other faculty and of other students who requested an opportunity to partake in a similar educational experience. As a result, a few additional educational units were added the following year, and still more the next year, so that by the current academic year the educational unit format is standard for <u>all</u> first-year direct service students. We are fortunate to have a number of faculty who possess the background necessary to teach both practice and clinical research, but several sections are taught conjointly by two faculty, one who is responsible for the practice component, and the other for clinical research materials and perspectives.

Conclusions

On the basis of these experiences at the University of Washington, there are a few generalizations that can be drawn which are pertinent to the subject of integrating research into education for direct practice in social work.

1. We are under no illusion that students trained in our educational units are thereby prepared to be clinical scientists. However, they now have the concept of what a clinical scientist is, they have learned some of the basic tools of clinical research--and some of these tools many of them will continue to use as part of their practice, and they see clinical research as something that can be of direct help to them as practitioners. In other words, there is not a discontinuity between the practitioner and the practitioner-scientist: rather, the difference is only one of degree and emphasis.

2. The small number of students who complete the educational unit and want to develop careers as clinical scientists will need to acquire the additional training required to conduct more sophisticated clinical research. We are now planning to develop programs for such students in the second year of the MSW program. Beyond that, of course, is doctoral study, where even more intensive preparation of clinical scientists is possible.

3. The emergence of single-subject design methodologies has played a critical, probably indispensible part in the recent success of efforts in a number of schools to incorporate research into the education of direct service social workers. Essentially, these methodologies have made it possible to conduct fairly rigorous experimental and evaluative research on a small scale with limited resources. Potentially even more important, these methodologies are especially well-suited for developmental research that seeks to discover new and better practice methods. Unfortunately, there has emerged a belief among some social workers that the single-subject methodologies are suitable only for behavioral approaches to intervention. This belief, which has impeded more extensive use of these methodologies, is without foundation. For example, this year we are offering nine sections of the educational units described above. In some of these the practice approach is based on ego psychology, others follow the task-centered approach, others teach an interpersonal orientation, and some are behaviorally oriented. What these instructors have in common is a commitment that the same questions should be raised about each approach, that none of them have a superior a priori claim to truth, that students should be taught the element of clinical research, and that in the long run the differences between approaches should be resolved or clarified through research findings.

I believe that the tools are now available with which to begin to build a systematic, empirical base for clinical practice in social work. Moreover, it has been demonstrated that these tools can be taught to students, and that most students find this learning to be interesting, pertinent, and even exciting. However, it also seems clear that if we ask graduates to use these tools, we will have to find ways to help create in the profession and in social agencies the conditions that are necessary if clinical research is to take root and flourish in social work.

NOTES

1. Aaron Rosenblatt, "The Practitioner's Use and Evaluation of Research," Social Work, Vol. 13 (January 1968), pp. 53-59.

2. Henry J. Meyer, Edgar Borgatta, and Wyatt Jones, Girls at Vocational High: Experiment in Social Work Intervention (New York: Russell Sage, 1965).

3. R. Levy and S. Jayaratne, The Experimental Clinical Practice Model of Intervention (New York: Columbia University Press, in press).

PART V

SPECIFYING GOALS FOR RESEARCH CURRICULUM

ON RESEARCH AND PRACTICE TEACHING IN SOCIAL WORK

by John R. Schuerman

My theme in this paper is the familiar exhortation that we need to train practitioners who are capable of developing personal systems of empirically based practice.[1] My context is education for direct service, although I think much of what follows applies to teaching about all social work intervention. I would like to suggest at the outset that if the practice teaching in the curriculum is not empirically derived, no overlay of research and statistics courses will succeed in producing empirically oriented practitioners in very large numbers. Furthermore, if the practice teaching is empirical, there isn't much left to worry about in regard to the research curriculum.

I suggest that the tacked-on model of research teaching will no longer do. The litany of dissatisfactions is well-known but some of it bears repeating:

1. Our students are largely interested in learning "how to do" and such more "intellectual" activities as research seem to be foreign to the make-up of their personalities. Often they seem incapable of engaging in the rigorous conceptual work necessary for research.

2. The research experiences offered by schools of social work often have little apparent relevance to practice. Such experiences are usually of three types: courses on research or statistical methodology, courses in which research studies are examined, and experiences in doing research, either in groups or individually. Research methods courses appear irrelevant because most students think they will never have a major part to play in the actual conduct of research. Hence why bother with all the nitty-gritty that will be forgotten anyway? Reading research studies seems similarly useless. A number of the studies that research teachers get excited about appear only to lay waste to large areas of social work practice, and students feel they can't learn how to do from studies that prove social work's ineffectiveness. Most other studies are not concerned with the core details of social work practice and thus it appears that there is little to be learned from them that is directly useful. Finally, research practica are often once-in-a-lifetime bad experiences. They appear to be conceived by the instructor only for the purpose of student torture without expectation of

significant contribution to the field. Research practica usually do not focus on the central activities of practice and thus appear to be of little personal value. Further, the need to complete them in less than nine months often necessitates major compromises with the canons of scientific rigor, and the resulting rationalizations are patently transparent to students. In sum, many of the research experiences in schools of social work are mere ritual.

3. Few social work graduates ever read many research studies and they do not use research results in the development of their own practice.[2]

A number of persons have decried an apparent weakening in the position of research in the graduate curriculum since the deletion in 1968 of the thesis or group research project requirement from the CSWE accrediting standards and the 1969 revision of the CSWE curriculum policy.[3] There are now fewer research credits required of students and fewer schools require either group or individual theses. These observers argue for a bigger cut of the credit pie and a return to the traditional rituals. Such longings for the past, I believe, are misguided. I know of no evidence that graduates of the past, with a lot of research credits, read any more research than those of more recent years. In fact I suspect that the hypothesis of no difference once again wins out.

In recent years there have been many efforts to reduce the tacked-on nature of research instruction through "integration" of such instruction with other elements in the curriculum, primarily practice methods courses and fieldwork. In the classroom, time is set aside for the examination of published research and attempts are made to connect the findings with the content of the methods course. In the field, time is taken to engage in research activities, usually selected to meet some need of the placement agency.

Integration has long been a particular preoccupation of social work educators. When used to denote a desired state of cognitive organization in the student I believe that it has not been operationalized to the point that it is measurable. In the present context, it appears to mean an effort to bring two different things into close physical proximity. Hopefully, the two bodies of content will then become linked in the student's mind. However, the mechanisms by which such linkage is supposed to occur are quite unclear.

Though such efforts at integration are well-intentioned, I think they will fail to the extent that they are efforts to bring together two different content areas without essentially affecting either area. If in these efforts we continue to teach methods of intervention that are not empirically based and if we continue to to teach research approaches that are not useful to the practitioner, then mere physical closeness in the curriculum will not yield the desired product.[4]

So our attention ought to focus first on the practice component

of the curriculum, and on its objectives and content. Among its objectives should be that of producing professionals whose procedures have, insofar as possible, known effectiveness. Further, such professionals should know how to evaluate their own effectiveness. Further, such professionals should know how to evaluate their own effectiveness and be committed to such evaluation in all their cases.

There are undoubtedly many ways to organize curriculum content to achieve such goals, but I would like to suggest one possible approach. The models of practice that are taught in class and field ought to be research-based. Empirical studies should be an integral part of the practice system and, insofar as possible, the intervention operations that are discussed should be investigated in systematic ways. The primary materials through which students learn practice ought to be research studies and descriptions of empirically based practice. There is plenty to be taught that meets this criterion.[5]

In both the class and the field, students ought to be taught from the beginning how to establish specific, measurable goals in their work with clients. The collection of systematic baseline data on cases should be required and procedures for measuring change over time should be taught. The student should learn how to specify treatment procedures behaviorally so that they can be recorded and studied. I would stress the process of measurement--that is, the specification of a concept and its behavioral operationalization. The idea that measurement requires definitions that can be independently applied by others with similar results should be central.

It is particularly important that this orientation pervade fieldwork. Fieldwork has long been, and will probably remain for the forseeable future, the dominant element in the curriculum. In fact I suspect that some researchers have tried to infiltrate it for that reason. Of all the elements in the curriculum, students and graduates rate fieldwork highest in value.[6] Unless fieldwork has an empirical orientation, all will be lost. The student's practice with each case ought to be evaluated through single-case designs, and collections of cases from many students might be used by faculty and students for the exploration of treatment issues through group research designs.

If such an approach were to be used in the teaching of practice, I believe that students would, as a matter of course, develop attitudes that would lead to easy incorporation of research into their practice. They would come to understand that a systematically empirical base is necessary for practice. Further, they would understand how to make use of both the research of others and self-evaluation to refine continually their own practice systems. In short, they would become dependent on research.

I have noted that if practice teaching became empirically oriented there would be little left for the research sequence to

worry about. There remains material, however, that is probably best taught in didactic research courses. The objectives of such courses should be to fill in and enlarge upon learning from the practice courses. They should not be expected to carry the brunt of the responsibility for research teaching. Such courses might well be offered later on in the curriculum, after the student is hooked on empirically based practice. By then, students should feel a need for a more formal treatment of research principles.

I would begin with an organized review of single-case methodology, together with some discussion of the developing techniques for formal analysis of data from such studies. I also would consider the structure of group designs, particularly in regard to their use in overcoming some of the limitations in the study of single cases. In fact, I would spend some time in discussion of the limitations and strengths of single-case and group designs and their complementarity. Students also ought to learn how to understand data in numerical and tabular forms and how to do at least some elementary manipulations of data. In this day and age it is probably desirable that students learn some sense of the purpose of inferential statistics and the meaning of an inferential probability statement. I would not, however, attempt extended treatment of data analytic techniques.

Beyond such methods courses, I think it is desirable to continue to offer courses that include systematic reviews of research literature in particular areas. It seems to me that if such courses are to be useful, they ought to be fairly specialized. One approach I find intriguing is to focus such courses on making use of empirical findings to develop practice models for a particular area.[7]

All that I have said implies that I hope we can produce practitioners who are relatively sophisticated about research. The production of "intelligent consumers of research" is often stated as an objective of the research sequence. However, depending on what is meant by research consumption, such an objective might be problematic. As researchers employ increasingly complex methodologies, particularly in the analysis of data, it will become increasingly difficult to expect the average practitioner to understand, much less critically evaluate, research reports. This problem already is acute in regard to group designs, and advances in the methodology of single-case studies may soon make such studies almost as difficult to comprehend.

In the face of this increasing complexity, it is necessary for us to specify more exactly what we mean by "research consumer." Perhaps a distinction here between understanding and critical evaluation would be useful. It is still possible to expect the student to understand the researcher's formulation of problems, most of what the researcher did, and the conclusions drawn from the data. However, it may not be reasonable to expect detailed understanding of data analysis procedures or the logic leading from data to conclusions.

Critical analysis of research reports is even more problematic. While practitioners can be expected to continue to call researchers to task for misinterpretations of the practice situation, it is too much to expect the average practitioner to be able to spot subtle mistakes in the methodology of a study. Evaluating whether or not certain conclusions are reasonable in light of a particular set of data also is often quite difficult. Practitioners will need to depend more on middlemen for such critical evaluations. We are beginning to see more reviews of research in particular areas and on particular questions, aimed at synthesizing research findings and clarifying research questions. Perhaps it is possible to identify evaluation criteria for such reviews.

My charge for this conference was, in part, to write on the differential goals and curriculum for research at the three main levels of social work education. I believe that most of what I have said applies to both the bachelor's and master's levels, but I am hesitant to engage in any extended attempt to differentiate content of these two levels. It may be useful to think in terms of two interrelated distinctions in content. One of these is that of applied research (largely evaluative in nature) on the one hand and research oriented to developing practice theory on the other. Related to this is the distinction between single-case designs and group designs. All students, whatever their level, ought to be exposed to both sides of these distinctions.

However, this formulation suggests that there might be some differences in emphasis in the specialized research courses at the BSW and MSW levels. Baccalaureate courses might stress applied research, evaluation, and single-case approaches. If students in master's classes are familiar with that material, their work might emphasize group designs and the development of practice theory through research. Further, the specializations that are supposed to be developed at the master's level ought to include courses in the research literature in the area.

My comments on research teaching at the doctoral level will be confined to programs designed to produce teachers and researchers. The objectives for the research curriculum in doctoral programs should be drawn from what I have said earlier about the desirable characteristics of practice. Teaching about practice and practice theory at the doctoral level should be highly empirical. Since most of our doctoral students do far more teaching than research after graduation (although I hope a better balance may be achieved in these outcomes) it is particularly important to produce individuals who will be able to teach practice in ways such as I have described.

Research teaching at the doctoral level ought to push students to highly sophisticated understanding of research and statistical methods. It is particularly important that students have available courses in data analytic techniques that expose them to recent advances in such areas as causal modeling and both discrete and continuous multivariate analysis. Doctoral students ought to

have the opportunity to explore systematically the epistemology of the profession. It is at this level that we ought to be trying to produce full-fledged critics of research.

I conclude with two predictions. First, an educational approach such as I have suggested will eventually do away with the sharp distinctions between practitioners and researchers and between research teachers and practice methods teachers.[8] Second, the development of empirically oriented practitioners should go a long way toward solving the problem we face in research utilization.

NOTES

1. I am indebted to my colleagues William Reid, Donald Beless, Edward Mullen, and Harold Richman for comments on an earlier draft of this paper.

2. Aaron Rosenblatt, "The Practitioner's Use and Evaluation of Research," Social Work, Vol. 13 (January 1968), pp. 53-59. See also Stuart Kirk and Joel Fischer, "Do Social Workers Understand Research?" Journal of Education for Social Work, Vol. 12 (Winter 1976), pp. 63-70.

3. Paul K. H. Kim, "Research Way to the Remedy for a Professional Dilemma in Social Work," Arete, Vol. 4 (Spring 1977), pp. 139-52.

4. For a study of one attempt at integration of research and practice see Michael S. Kolevzon, "Integrational Teaching Modalities in Social Work Education," Journal of Education for Social Work, Vol. 11 (Spring 1975), pp. 60-67. See also Sidney E. Zimbalist, "The Research Component of the Master's Degree Curriculum in Social Work," Journal of Education for Social Work, Vol. 10 (Winter 1974), pp. 118-23.

5. A number of people have said this. For one who has said it in print see Scott Briar, "Effective Social Work Intervention in Direct Practice: Implications for Education," in Facing the Challenge: Plenary Session Papers from the 19th Annual Program Meeting (New York: Council on Social Work Education, 1973).

6. For one piece of evidence for this, see John Korbelik, "Follow-up Study of Graduates of SSA 1971-72-73," mimeographed (Chicago: The University of Chicago School of Social Service Administration, May 1973).

7. For an example see Edward J. Mullen, "An Empirical Approach for Teaching Micro-Level Social Work Practice" (Paper presented at the Council on Social Work Education Annual Program Meeting, Phoenix, 1977).

8. See William J. Reid, "A Journal for Research: An Editorial," Social Work Research and Abstracts, Vol. 13 (Summer 1977). Our experience at the School of Social Service Administration at the University of Chicago may be instructive. About ten years ago we established (or revived) a

small research concentration in our master's program. In the last few years the program has been declining in numbers of students. It appears that the research-oriented practice sequences that have been developed at the school have been absorbing students who earlier would have gone into the research concentration. Therefore the decline in the research concentration is not, in my view, a negative trend.

SPECIFYING CURRICULUM GOALS FOR RESEARCH IN SOCIAL WORK EDUCATION

by Anne Minahan

In assigning me the topic of specifying curriculum goals for research in social work education, the planners of this conference have asked me to: (1) discuss the kind of research curriculum that should be developed at the baccalaureate, master's, and doctoral level, (2) identify obstacles to research utilization and production, and (3) consider means for overcoming the obstacles.1

At first this assignment seemed overwhelming because I had never taught a research course, had never conducted a methodologically sophisticated program evaluation, had never designed a program for a computer, and wouldn't know a regression analysis if I had seen one. In fact, some of my professional colleagues refer to me as a nonresearcher. As I thought about this, I began to realize that perhaps the major obstacles to the utilization and production of research are the ways that I and other practitioners and educators, and students, have thought about research and practice and the relationships between them.

In this paper I will discuss the assumption of social workers that research and practice are separate and require different types of activities, review the similarities and differences between research and practice, and conclude that both social work researchers and practitioners are consumers and producers of research. Finally, I will present assumptions that can be used in development of curriculum goals and give a few specific suggestions for curriculum at the baccalaureate, master's, and doctoral levels.

Social Workers' Views of Research

Social workers who wonder what research is can find a dictionary definition: "Diligent and systematic inquiry or investigation into a subject in order to discover or revise facts, theories, applications,"[2] or the definition of purpose offered in a textbook widely used in social work research courses: "The purpose of research is to discover answers to questions through the application of scientific procedures. These procedures have been developed in order to increase the likelihood that the information gathered will be relevant to the questions asked and will be reliable and unbiased."3

The questions that social workers want answered are those that are related to the focus and concerns of the social work profession.

Because the focus is broad--on interventions in the interactions of people and their social environment--the list of questions (relating to facts, theories, and applications) they want answered seems endless. Every social worker could prepare a laundry list of questions relating to areas such as: interpersonal relations; methods of intervention; developmental stages in the life cycle; social problems; structure and processes of families, small groups, neighborhoods, organizations, societal institutions, and communities; social policy development; and programs to deliver services.

Practitioners and educators also could cite a bewildering, unclassified, and sometimes contradictory list of answers to many questions asked previously by social science researchers.

Further, social workers want "right" answers to their questions in order to improve their practice, to design social programs, and to convince service consumers and the institutions supporting social work services that social work does accomplish something of value. Therefore social workers expect that researchers will use scientific procedures to produce relevant, valid, and reliable knowledge. Researchers have responded to this concern through the use and development of sophisticated research methodology, statistical procedures, and program accountability systems.

Thus social work students and practitioners are confronted with an unending list of questions to be answered, an array of answers to many questions that have accumulated through social science research, and ever growing research methodology and statistical techniques. What is their response? My interactions with students and practitioners, and conversations with faculty colleagues suggest at least three kinds of responses.

First, a minority of students and practitioners plunge into research as a major interest and specialization. Some of these assume that research is a "pure" science: objective, value-free, unbiased, logical, and rational. Some believe that as physical scientists appear to discover objective reality in the physical world, so social scientists can discover reality in the social world. Many of these seem to agree with Greenwood that the researcher-scientist produces knowledge and is different from the practitioner who is a consumer of knowledge and applies it in practice.[4]

Second, many other students and practitioners also accept the separation of the researcher-producer of knowledge from the practitioner-consumer of knowledge and define themselves as practitioners and nonresearchers. Many of these, in their consumer role, study and evaluate research findings and work to apply them in their practice.

A third group of students and practitioners has a cynical view of research and knowledge. They question the validity of findings and theories and models and observe that research findings are not used in the "real" world, and because the findings are generalizations that cover broad classes, they are not helpful to

practitioners who deal daily with unique individuals in unique situations. These students and practitioners stress the artistic, intuitive elements of practice or rely on common sense and their own experience as guides to action.

Although these three types of responses to research may be exaggerated, I believe many social work educators share some of these views and that these ways of thinking about research and practice present major obstacles to the utilization and production of research by social workers.

Similarities Between Researchers and Practitioners

An assumption underlying the above three responses is that research and practice are separate and require different types of activities. (Greenwood refers to them as "science" and "technology."[5]) Before social work curriculum goals are formulated, it is necessary to examine this assumption and look at the similarities as well as the differences between research and practice.

If we use the definitions of research cited earlier and examine the activities of researchers and practitioners, we find that both seek answers to questions and engage in diligent and systematic inquiry in order to discover or revise facts, theories, or applications (interventions). However, if social workers are researchers, we expect them to be searching for answers to discover facts about many units (for example, demographic data) or generalizations about relationships between two or more variables. On the other hand, if social workers are practitioners, we expect them to be seeking answers through diligent inquiry into specific, individual situations. However, whether social workers are engaged in seeking generalizations or seeking answers to individual situations, I suggest that both researchers and practitioners are affected by and need to be concerned with issues relating to: values, assumptions, establishment and evaluation of goals and tasks, involvement of others, and modes of thinking. I will discuss each of these separately.

Values

Some students, practitioners, and educators seem to assume that social work researchers are dispassionate and value-free. This is intriguing and puzzling in a profession that places values as a keystone of professional practice. Today many researchers acknowledge that values affect researchers' interests, assumptions, goals, methods, and results.

A number of years ago Gordon made his classic differentiation between values and knowledge.[6] Following Gordon, Pincus and Minahan pointed out:

> Values are beliefs, preferences or assumptions about what is desirable or good for man. An example is the belief that society

> has an obligation to help each individual realize his fullest potential. They are not assertions about how the world is and what we know about it, but how it should be. As such, value statements cannot be subjected to scientific investigations; they must be accepted on faith. Thus we can speak of a value as being right or wrong only in relation to the particular belief system or ethical code being used as a standard.
>
> What we will refer to as knowledge statements, on the other hand, are observations about the world and man which have been verified or are capable of verification. An example is that black people have a shorter life expectancy than white people in the United States. When we speak of a knowledge statement as being right or wrong, we are referring to the extent to which the assertion has been confirmed through objective empirical investigation.[7]

Social work values lead researchers and practitioners to seek certain answers to certain questions. For example, their values lead them to believe that individuals should reach their full potential. They ask questions to find out in what ways certain people are not reaching their potential and what obstacles are in the way. They ask questions to find out what populations are being served by what services. They ask questions to learn about values of others. They ask questions to find out how certain interventions are perceived by different people and what the interventions achieved.

Values also lead to definitions of social problems. Leonard Goodwin, in his provocative critique of social science research, pointed out that social problems do not have an objective social reality. He said that our values lead us to define certain events as problems "presumably because they hurt individuals or social systems."[8] Different people define problems in different ways. For example, a woman who is a single parent on welfare may perceive and define her problem in one way, a social worker in another way, a tax-conscious politician in another way, and a working poor, single-woman parent in another. Peoples' values and beliefs shape their perceptions of what a problem is, lead to questions they want answered, and affect their interpretation and use of the answers.

Researchers and practitioners collect data to support their values. For example, research cannot answer the question, "Should government establish a national health system?" Social work values concerning the right of everyone to good health care will lead researchers to ask questions about the delivery of health care, who is served and not served, the financial costs of different health care systems, opinions of consumers and providers, and a host of other questions. The researchers' values guide the questions they ask and they use the answers to support their point of view. Similarly, a practitioner in a hospital who believes individuals have a right to humane treatment will collect and use data to demonstrate specific and cumulative incidences of inhumane

treatment.

Social work students are taught to be aware of their own values, how their values affect the data they collect and their actions, to know when they are operating from confirmed knowledge and when they are operating from values, to be aware of the values of others and how others may be using information to back up their point of view, to remain open to new knowledge, to reexamine their beliefs, and to recognize that no one, including themselves, is or should be value-free. These teachings (which are based on both value and knowledge) seem applicable to both practitioners and researchers.

Assumptions

Practitioners and researchers both make assumptions about the relationships between variables. These assumptions may flow from a variety of theories, such as theories about the interrelationships between people in different systems, theories that explain growth and development, or theories about the usefulness of professional interventions. Assumptions also flow from past experiences of researchers and practitioners and their value and knowledge base.

Assumptions, based on preferred or valued concepts and models and knowledge, have led to sharp divisions in the social work profession about the objectives of social work. Although social workers have been able to agree on broad objectives relating to resolution or reduction of "psychosocial" problems or "problems in the interactions between people and the environment," many practitioners and researchers have acted as if they assumed that the major objectives and focus of social work were related either to people or their environment, that the cause of problems was rooted in either people or their environment, and that interventions could be designed for one or the other. Other practitioners and researchers have assumed that the objectives of social work should focus on the linkages and interactions between people, and that the environment and interventions should be designed to focus on the interactions.

These assumptions have affected the development of accountability systems in organizations employing social workers. For example, systems that seem to place a premium on the number of hours a worker spends with an individual client or family seem to be built on the assumption that problems are rooted in clients and can be solved through interpersonal interactions. On the other hand, accountability systems that seem to expect the worker will report extensive time spent in contact with people other than an individual client, seem to be built on other assumptions.

Different assumptions have led practitioners and researchers to formulate different hypotheses about what is creating a situation and processes to change situations. Hypotheses lead researchers to

seek answers to certain questions. For example, Is there a relationship between poverty and academic achievement in school? or Is there a relationship between the number of schools children have attended and their academic achievement in high schools? or Will social work practice affect academic achievement in school? Assumptions lead practitioners to form hypotheses that lead them to seek answers to questions in specific social work situations. For example, Is Johnny's failure in school due to his interactions with his parents? or his classmates? or his teachers? or his hopelessness about obtaining a job? or all of these? The answers to the questions formed by one set of hypotheses may lead to other hypotheses and questions about interventions. For example, If teachers act as if they believe children will succeed in school, will children succeed?, or If all the members of a specific family receive a certain kind of family counseling, will Johnny do better in school? Further, all the questions cited above seem to be based on the assumption that children's adjustment in school is related to their future life satisfactions and is desirable.

Practitioners try out interventions to test the validity of their hypotheses. And researcher-program evaluators form hypotheses to measure the usefulness of the interventions of a group of practitioners. (Sometimes the researchers share the same assumptions as the practitioners involved, sometimes they do not, and sometimes one or both do not make their assumptions clear.) However, since hypotheses are based on assumptions, and the answers that are obtained are answers to the questions that flow from the assumptions, assumptions control not only the questions but the answers as well. If you look for pathology in an individual you may find it. If you look for problems within a societal institution you may find them. If you look for problems in the interactions between people and societal institutions you may find them. Or, as students sometimes say, "What you look for is what you get." You ordinarily do not get answers to questions you do not ask, or you may get the right answer to the wrong question for the situation.[9]

Assumptions or thought systems are necessary for researchers and practitioners who are trying to understand situations, find "mind holds" to guide their thinking, and formulate hypotheses about what is happening and what interventions or actions might be appropriate in situations. In fact, one of the objectives of education is to help students formulate hypotheses. However, another objective of education is to help students learn to test out the validity of hypotheses and to discard hypotheses that do not seem useful and to formulate others. Of course, a necessary first step in this process is for practitioners and researchers to recognize their assumptions.[10]

Establishment and Evaluation of Goals and Tasks

Both practitioners and researchers establish goals for their actions. The goals of practitioners usually are stated in terms

of specific ends to be achieved in specific practice situations. Researchers' goals may be to discover the relationship between variables, to evaluate if a program or a collection of practice interventions have reached their goals, to collect demographic data, or to construct models or theories to enable them to think about or organize knowledge. Practitioners and researchers engage in many similar activities in establishing and evaluating goals and tasks.

First, before either practitioners or researchers establish goals, they engage in data collection and assessment in order to determine what goals seem relevant to the situation, and what goals are feasible and can be accomplished through the performance of specific tasks and activities. Asking questions and thinking about both goals and tasks ordinarily goes on simultaneously. Researchers and practitioners ask what goals can best help answer questions and problems. Researchers and practitioners ask if necessary tasks for goal achievement can be performed (for example, Can access to data be obtained? Can appropriate other people be motivated to perform certain tasks and sanction the goals? Are necessary professional knowledge and skill available?).

Second, in the establishment of goals and tasks, both researchers and practitioners engage in analytical and interactional activity. Although few people doubt that both researchers and practitioners think, and that practitioners work in collaboration with clients and others in establishing goals and tasks, some people seem to assume that researchers work only in splendid isolation when formulating goals. But researchers are influenced by the opinions of others, and in the establishment of goals and tasks, do interact with colleagues and sponsors of research, with people who have access to data, with people who disseminate research findings, and with people who might be influenced by knowledge coming from research.

Third, our previous discussion indicates that values and assumptions of practitioners and researchers will influence not only the goals (which may be considered valued end-states) but also the tasks and interventions performed to reach goals.

Fourth, both practitioners and researchers need to specify goals that can be measured so they will know if the desirable outcome was achieved or if the hypothesis was proved. They need to do this in order to be accountable for goal achievement to clients and sponsors and others who sanction social work activity, and to themselves.

Fifth, both practitioners and researchers need to specify the tasks that were or are to be performed to reach their goals. Practitioners and researchers can learn what specific tasks appeared to lead to what goals in a specific situation, test out these experiences in other situations, and develop generalizations to improve their practice. However, different workers perform the same tasks differently (for example, in making a referral or in teaching patients to use assertive behavior with medical staff). Thus, in

evaluating the relationship of task performance to goal achievement, practitioners and researchers need to examine how the tasks were performed in order to determine if the tasks were appropriate for the goal.

Researchers who are doing program and practice evaluation have, in a sense, a double duty. Not only do they have to specify their own goals and tasks, but they have to determine what goals and tasks the programmers and practitioners used, because these presumably are being evaluated. In designing specific tasks to reach specified goals, researchers and practitioners can learn from the critiques of social program evaluation in the volume by Mullen and Dumpson. For example, Meyer and Perlman both point out that in those studies that presumed to measure the effectiveness of social casework, the researchers (and apparently the practitioners whose practice was evaluated) did not specify what the casework process was that the workers engaged in. The practice interventions were not described and the researchers and practitioners seemed to assume that all social (case) workers did the same thing.[11] Mullen and Dumpson seem to criticize practitioners as well as the research evaluators when they say that even "the positive-outcome studies did not adequately define and measure the nature of the interventions: thus, how are we to repeat or learn from successful programs?"[12]

Sixth, both practitioners and researchers need to specify the measures they will use to determine if their goals are reached and if the tasks did achieve the goals. Researchers use a variety of measurement devices including sophisticated statistical techniques. Practitioners also devise measurement devices to measure and monitor task and goal attainment.

However, even if the practitioner and the researcher specify goals, tasks, and activities and use measurement criteria, they cannot be absolutely certain that all the goals were reached, that the interventions performed were responsible for achievement of the outcome goals, that all the variables which appear related were the determining variables, or that the changes and relationships identified will endure over time. In the social realm, people are interconnected to a variety of systems--families, friends, neighborhoods, organizations, societal institutions, and communities. All of these are influenced by major societal events (for example, recessions, new legislation affecting service delivery, redefinitions of social problems). When practitioners and researchers are engaged in assessments and interventions, they can only capture and influence some of the variables and forces that are operating and can never depict complete reality or know for sure if outside influences that were not considered affected the outcome, and what in the future may influence the variables studied.

Further, although both researchers and practitioners are concerned about generalizations that may be applied to specific situations, both know that no two people and situations are exactly alike and that although knowledge based on past research and practice may be

a guide to interventions, there can be no absolute certainty or prescription that in a specific social situation certain actions will lead to certain results.

Involvement of Others

The teaching of social work practice emphasizes the involvement of other people: (1) because social work values lead to the belief that people have a right to make decisions concerning their own lives and have a right to information about alternatives open to them and possible consequences of their actions; (2) because of the knowledge that people are more likely to work for and implement goals that they have established themselves; and (3) because people have control over information about their perceptions, experiences, and their families, organizations, and institutions, and social workers need to involve them to gain information.

Social work practitioners are taught how to determine who should be involved in interventions, how to involve people in research (in finding answers to questions), how to provide feedback to people about the results of their actions, and how to provide information to people that will influence their actions. Social workers are taught that when people are involved, data collection and intervention are often simultaneous actions because people will often change their behavior and attitudes when they acquire information and feedback from others.

In the past many researchers have stressed separation of the research role from the action role of the practitioner to prevent bias on the part of the researcher. However, in recent years some evaluators of social science seem to be suggesting that if research is to be relevant and applied, researchers should start acting like practitioners and involve other people in design, data collection, and intervention. For example, Webb says: "The recently accumulated body of evaluative research is seen as feedback to macrosystem planning, policy, and administration, rather than as measures of the effectiveness of potential practice methodologies."[13] Mullen and Dumpson comment that the "development of program, to be sound, must be based on systematic feedback. We stand convinced that program evaluation must be built into all major interventive efforts, and feedback should be part of the ongoing processes of agency systems."[14] Others have suggested that research findings will continue to gather dust unless the researchers feed information to people involved at various points in the research process and, on the basis of feedback received, shift their goals and methodology.

Goodwin's recent book is an argument for an experimental social research in which the researcher is involved with both study and intervention through interactions with policy makers and consumers of service. He describes the process:

> New possibilities for research become apparent when the arbitrary separation of knowledge from action is overcome and the distinction

> between scientific and practical knowledge is dropped. The researcher, in his professional role, can undertake social actions such as involving influential people and others concerned about a problem in the design, implementation, and interpretation of the research. More specifically, he or she can involve these people in examining the underlying assumptions that influence them and others to define particular events as problems and various programs as solutions. More often than not, persons are unaware of their basic assumptions and the evidence supporting or controverting them. In the course of this confrontation with new persons and new data, the beliefs and actions of those involved may be altered. New data and new scientific knowledge about psychological and social change might be gained. These new formulations, in turn, might be fed back to participants, with subsequent study of the impact of the new confrontation on the problem solving process, and so on.
>
> This continuing process I call <u>experimental social research</u>. It explicity regards knowledge as generated from, and in turn affecting, the problem-solving effort. The social scientist is creating as well as discovering social reality as he affects the knowledge and actions of individuals. No violation of the traditional canons of science is involved. Empirical testing of theoretical propositions is still required. The approach represents the full extension of experimentation to the social realm.15

He assumes that research cannot determine what values are best, that people do change values and behavior on the basis of feedback, and thus feedback can change the situtation being studied and that this is desirable because knowledge will be both generated and utilized.

Goodwin's description of the "professional role" of the researcher is indeed similar to the practitioner role discussed earlier. He illuminates how research and practice both can be enhanced if we see "knowledge" and "action" or data collection, analysis, and interventions as moving together in an interactive process between professionals and others.

These ideas are not different from those of researchers who believe that if people are aware that research is being done, they may change their behavior and thus bias or change the results. In fact, if researchers are action-oriented and want people to change, they can feed in not only the information that research is being conducted, but also information that is being generated, and in cooperation with those involved, monitor and interpret the results and feed the results into the action. Further, researchers often argue that an outsider who is not involved with those on the inside who are being "studied" can be more objective and determine what "really is going on," than can an insider who is involved with the situation. However, just as researchers bring their values, assumptions, perceptions, and knowledge to the situation being studied, so people on the inside have their values,

assumptions, and knowledge of the situation--information that may not be easily available to the researcher unless the insiders are involved. Although all research studies may not lend themselves to the feedback model described by Goodwin, researchers and practitioners could regard the view from the outside as not always "better" than the view from the inside, but "different."

Modes of Thinking

Critics of research have urged researchers to "act like practitioners" and involve people and provide feedback; critics of practice have urged practitioners to "think like researchers" and use methods of logical inquiry. Indeed, teachers of practice have turned to research methodology to design framework for thinking about data collection to teach students how to formulate questions and obtain relevant, unbiased answers. However, some educators, practitioners, and researchers, in their thinking and talking about art and science in social work, have tended to equate art--creative, intuitive thinking and actions--only with practice, and science--orderly, rational thinking--with research.

Both researchers and practitioners use art and science in order to think and to know. Both rely on rational, logical thinking, both rely on knowledge statements that have been confirmed by empirical investigation, and both rely on creativity, imagination, and intuition. Researchers and practitioners go through an ongoing circular process of creative generating of ideas, logical thinking, and empirical investigation. The generating of ideas usually precedes logical thinking as both researchers and practitioners approach a situation and speculate about different ways to view it. The creative mind plays over many alternative ways to think about what might be going on and what variables might be connected.

After ideas have been generated, logical thinking and a review of existing empirical generalizations lead to <u>specific</u> hypotheses and questions. Then creative thinking helps to generate possible approaches to design and data collection. Logical thinking and knowledge about data collection methods and the feasibility of obtaining data guides the selection and design of <u>specific</u> questions and approaches of empirical investigation. The three modes of thinking continue as researchers and practitioners evaluate and test the answers they obtain from their questions, formulate new questions, speculate about the meanings of their findings, and perhaps start the process again.[16] And, if data collection and intervention proceed together as suggested earlier, the circular process may be repeated many times by researchers, practitioners, and others with whom they are involved. In fact one of the activities of both researchers and practitioners may be to teach others to employ the different modes of thinking.

However, just as researchers and practitioners need to know if they are operating from value or knowledge, they also need to be aware when they are operating from intuition and creativity

and when they are operating from logical thinking and empirical findings. Intuition and creative thinking can open up areas of exploration and suggest possible relations between variables and innovative data collection methods. Logical thinking, followed by empirical investigation, can produce new knowledge.

Assumptions and Goals for Curriculum Development

Faculty of schools of social work who design specific curriculum goals for research and practice will make their own assumptions about the relationships between research and practice. I believe current assumptions that research and practice are separate and require different types of activities will not be validated if an examination is made of the similarities as well as the differences between researchers and practitioners in relation to values, assumptions, establishment and evaluation of goals and tasks, involvement of other people, and modes of thinking. On the basis of my examination, I suggest consideration of the following assumptions to guide development of curriculum goals:

1. The purpose of research--to discover answers to questions through thinking and action--is the major purpose of all education, including social work education.

2. The major obstacle to the use and production of research by social workers is the way educators, students, researchers, and practitioners have thought about research and its relation to practice.

3. Both practitioners and researchers are producers and consumers of knowledge. If we place research activity on a continuum, at one end we could place researchers who focus on such activities as collection of demographic data, program and practice evaluations, and examination of social problems and who use sophisticated research methodology and statistics, and, in the process, produce knowledge generalizations. These researchers also are consumers of knowledge produced by others. At the other end we could place practitioners who primarily have adopted the consumer role and use assumptions and generalizations produced by researchers in order to make individual situations fit the generalizations. Unless these practitioners also become producers of knowledge as well as consumers, they run the danger of trying to fit theories to inappropriate situations and seeking the wrong answers. In the middle of the continuum we could place practitioners who not only consume and evaluate generalizations produced by others, but who also view every practice situation as an opportunity to frame hypotheses based on their own and others' generalizations and assumptions, as questions to test out hypotheses, design and evaluate goals and tasks, and produce new assumptions and generalizations that may serve as hypotheses for themselves and others in

individual situations.[17] These practitioners are similar to other researchers who study a single case in order to formulate hypotheses.

4. All social workers operate from values and need to make these explicit to themselves in order to know when they are acting on the basis of values and when they are guided by knowledge and how their values affect their research activities.

5. All social workers operate from assumptions and hypotheses and need to learn how to formulate them explicitly in order to test their validity in specific situations, and discard them when they are not appropriate.

6. Social workers who do research only obtain answers for those questions they ask, and can never fully understand social reality.

7. Both researchers and practitioners are involved in action and change. Researchers and practitioners who involve consumers of service and policy makers in the collection and evaluation of information can affect the knowledge, perception, attitudes, and actions of others and help create new situations, which in turn can be evaluated.

8. The use of logical thinking, creative thinking, and empirical investigation leads to critical challenging of assumptions about knowledge, programs, policies, interventions, and the design of new questions.

These assumptions, if they are accepted, however tentatively, could be translated into beginning goals for the development of a curriculum for all students--researchers and practitioners. (I am assuming that curriculum goals are not set in concrete and are always subject to critical faculty evaluation and change.) Schools would need to decide what specific content should be in courses designated as "practice," "field," or "research," what content should be in "general" or "base" courses for all students, and what should be in special courses for students who want to specialize in research. However, the assumptions I have stated imply that all practitioners should act like researchers and all researchers should act like practitioners. Schools of social work should experiment with ways of delivering this message to faculty and students.

Specific Curriculum for Baccalaureate, Master's, and Doctoral Levels

Curriculum goals flowing from the assumptions listed above can be adopted for all levels of social work education. Although I assume that each level should build on the previous level and not repeat content, at <u>every</u> level there should be emphasis:

1. That practitioners and researchers are both producers and

consumers of knowledge.

2. That critical thinking and knowing involves logical and creative thinking and use of empirical observation.

3. That content which already is included in the curriculum on social work objectives and perspectives, values, data collection, assessment, establishment and measurement of goals and tasks, and methods of involvement of consumers and people with different bases of influence is applicable for students who are going to specialize in research as well as other practitioners. (This general content ordinarily is presented in a bachelor's program or in the first year of a two year master's program.)

Following are specific suggestions for curricula to highlight some of the content listed above, as well as additional suggestions relating to research activities.

Baccalaureate

Graduates of bachelor's programs ordinarily are engaged in social work practice in agencies and institutions. Curriculum should prepare these graduates, as consumers of knowledge, to read critically documents from their own and other institutions, to understand research language, to evaluate reported research findings, to understand the meaning and use of statistics, and to recognize that research findings may be used to control the flow of information and to present a point of view.

Education should prepare these graduates, as producers of knowledge, to view every practice situation as a mini-experiment, to use data collection and knowledge generalizations in order to create hypotheses, to establish specific and measurable goals and tasks, to test hypotheses, to evaluate goal and task achievements, to produce generalizations to test in other practice situations, and to communicate these experiences and generalizations to others.

Bachelor's graduates also should be able to cooperate and be intelligent participants in large-scale research projects. They should be able to collect and evaluate information, alone or in cooperation with others, on characteristics of consumers, neighborhoods, societal institutions, and government bodies.

Bachelor's graduates also should know how to use consultants to help them frame hypotheses for individual practice situations and to design data collection strategies.

Master's

The master's graduate may be engaged in a variety of specializations in a variety of practice settings and may concentrate on

such activities as research, planning and policy formation, program development, and supervision, as well as direct contact with service consumers. The curriculum should build in the base provided to the baccalaureate graduate and provide graduates with a wide range of generalizations to test out in their practice. The curriculum should prepare graduates to plan, coordinate, and orchestrate involvement of a variety of people in research activities, such as collection of data about social problems and to document needs and identify characteristics of program consumers, program and practice evaluations, and design of information and accountability systems.

Education should emphasize the individual accountability of master's level social workers and stimulate students to devise and apply methods of evaluation for their practice to measure their effectiveness and produce knowledge generalizations.

Master's graduates should learn to serve as consultants to others in research activities, as well as know how to use consultation for their own activities.

Doctoral

The emphasis in most doctoral programs is teaching students to initiate research activities to obtain knowledge generalizations of interest to people concerned about practice, programs, social problems, and social policy. Thus the curriculum should provide students with opportunities to acquire advanced skills in research design, statistical analysis, methods of inquiry, and formulation of theories and models.

Because the emphasis at this level often is on technical research skills, educators need to continue to emphasize the importance of values, assumptions, involving others, and providing feedback in research activities, and the limitations as well as opportunities of research.

The curriculum suggestions offered above are intended to prepare social workers for entry positions. Thus, at each level, emphasis must be placed on the basic purpose of education--learning how to learn and learning how to discover answers to questions.

NOTES

1. I am indebted to my colleague Allen Pincus who stimulated me to think about many of the ideas presented in this paper and gave me many helpful suggestions.

2. The Random House Dictionary of the English Language--The Unabridged Edition (New York: Random House, 1967).

3. Claire Selltiz, Maria Jahoda, Morton Deutsch, and Stuart Cook, Research Methods in Social Relations, 2nd ed. (New York: Holt, Rinehart and Winston, 1959), p. 2.

4. Greenwood does state that a minority of researchers are interested in the application of scientific theory and a minority of practitioners are interested in theory construction. See Ernest Greenwood, "The Practice of Science and the Science of Practice," in The Planning of Change, ed. Warren G. Bennis, Kenneth D. Benne, and Robert Chin (New York: Holt, Rinehart and Winston, 1962), p. 81.

5. Greenwood, op. cit., p. 73.

6. William E. Gordon, "A Critique of the Working Definition," Social Work, Vol. 7 (October 1962), pp. 3-13. Also see William E. Gordon, "Knowledge and Value: Their Distinction and Relationship in Clarifying Social Work Practice," Social Work, Vol. 10 (July 1965), pp. 32-39.

7. Allen Pincus and Anne Minahan, Social Work Practice: Model and Method (Itasca, Ill.: F. E. Peacock, 1973), p. 38.

8. Leonard Goodwin, Can Social Science Help Resolve National Problems? (New York: The Free Press, 1975), p. 10.

9. For further discussion about obtaining the right answer to the wrong question, see Walter L. Walker, "Utilizing Research Findings for Macrosystem Intervention," in Evaluation of Social Intervention, ed. Edward J. Mullen, James R. Dumpson, and Associates (San Francisco: Jossey-Bass, 1972), p. 104.

10. Mullen and Dumpson, in their review of findings of 13 professional social work interventions, stated that one of the reasons the projects failed to meet their goals was that few studies asked "why the intervention is being undertaken, what assumptions are involved, and what the theoretical underpinning is." Ibid., p. 10.

11. Carol H. Meyer, "Practice on Microsystem Level," in ibid., pp. 158-90; and Helen Harris Perlman, "Once More, With Feeling," in ibid., pp. 191-209.

12. Ibid., p. 10.

13. Gene E. Webb, "Rethinking Macrosystem Intervention," in ibid., p. 128.

14. Ibid., pp. 253-54.

15. Goodwin, op. cit., pp. 16-17.

16. This approach is different from that outlined by Greenwood, op. cit., pp. 76-77. He begins with investigations into empirical generalizations drawn from obervations--the gathering of facts. Then he suggests a free-wheeling speculative-creative process to make sense out of the facts and to create a theory. His third step is the use of logical thinking and empirical investigation to test the theory. This approach ignores the use of creative thinking at the beginning of a research effort and assumes that the researcher knows what facts to gather or what questions to ask. This approach may keep researchers from considering many different ways to look at a situation and from challenging and examining their own assumptions. His approach also seems to ignore the use of creativity in the design of data collection methods.

17. The view that practitioners are producers of knowledge places a responsibility on practitioners to communicate their generalizations to others.

PART VI

INCREASING THE PRODUCTION AND UTILIZATION OF RESEARCH

STRATEGIES AND TACTICS FOR INCREASING RESEARCH PRODUCTION AND UTILIZATION IN SOCIAL WORK EDUCATION

by Jon L. Bushnell and Gregory M. St. L. O'Brien

It has become an accepted premise that the social work profession does an inadequate job of producing useful research and of using research to improve the design and delivery of services. In this paper we will not discuss the desirability or the presumed benefits to be derived from increasing the production and utilization of research; rather, we will assume that these benefits exist and that they are desirable. When we speak of increasing research production and utilization, we will be speaking about increasing the production and utilization of research in social work--including both social work practice and social work education.

We will focus primarily upon the question: "How can the professional education systems in social work be modified to bring about an increase in the production and utilization of research?" A secondary question to be addressed is: "What changes in national social work organizations such as the Council on Social Work Education, the Child Welfare League of America, the Family Service Association of America, and the National Association of Social Workers can contribute to improving the utilization of research?"

Before answering these questions, it will be helpful to consider two additional questions:

1. What roles do the professional educational systems (or national social work organizations) play in the production and utilization of research at the present time?

2. What barriers exist which inhibit increases in research production and utilization?

We should state that when we say "professional educational systems" we are speaking of schools or colleges that offer degree programs (bachelor's, master's, or doctorates) in social work, social welfare, human services, or some such field.

When considering the roles of professional educational systems in research production and utilization, there are some roles that come to mind immediately. First, a substantial (and hopefully increasing) portion of the production emanates from the professional educational systems. Second, the professional educational systems are the principal trainers of those who do or should use any research

production (that is, we train the practitioners who are the main consumers of research). Third, the professional educational systems are increasingly becoming the prime sources for training the research producers (for example, social work program faculty and researchers/evaluators in practice settings). Fourth, those in the professional educational systems such as faculty, administrators, and research staff also are users of research--both to generate new research and to modify educational programs and curricula.

Since we in the professional educational systems are the main producers and train future producers, we are in an excellent position to increase both the quantity and the quality of research production. Since we train the consumers of research, including both practitioners and ourselves, we also are in an excellent position to promote increases in research utilization. These roles are not independent of one another nor are the research production and the research utilization problems independent of one another. They are intimately intertwined, as are supply and demand in any production/marketing setting.

Whatever the potential role of professional schools, their accrediting bodies and professional societies, an increase in the utilization of research only can be achieved through overcoming barriers which, in many cases, are quite formidable at the current time.

Research for Application

Before discussing specific barriers that we believe need to be examined prior to developing strategies to improve research utilization, we would like to introduce the term "research for application." Lacking a better definition, what we're seeking to identify is that subset of research activity, the objective of which is the solution of a problem identified in the practice of a professional field. Research for application is not different from other research in its methodology. It usually calls for as much, if not greater, sophistication in the application of a field's methodological tools. What is different is the focus of the question and the form of the information that derives from the research effort.

Halpert identified the difference between the questions asked by researchers and those asked by practitioners.[1] Researchers' (applied researchers') questions are often derived from examining the potential applicability of a basic theory, or some variant of that theory. These are differentiated from questions posed by practitioners, which may relate to, but are not derived from theory. Practitioners' questions are derived from experience and their answers have immediate application. They also may contain potential seeds of theory modification.

Research utilization, as the term is most commonly used, seems to refer to a step in which a practitioner takes some research results and through a process of interpretation, synthesis, making

analogies, and drawing inference, attempts to apply the general results to solving a specific real life problem that he or she has encountered. It is at the tail end of an information development and dissemination process that begins with an examination of basic theory and ends with dissemination and utilization (with basic research and applied research in between). This places heavy emphasis on the dissemination of findings that are there in the first place--having been developed from basic theory, basic research, and applied research. It also places heavy reliance on the motivation, capacity, and skill of the potential user (the practitioner) to interpret, synthesize, construct analogies, and attempt to draw inferences about the meaning of applied research findings to his or her particular situation.

If, on the other hand, we begin approaching the need for research and research-based information from the perspective of the practitioner, the flow would appear something more like this: a problem is identified in practice; information need is identified by the practitioner as a part of the problem solution; the problem is analyzed and the information need reexpressed through problem analysis in a way in which research-based information can have meaningful input; the research is conducted (drawing on what is known from basic theory and applied research) with a focus on application to the particular problem as analyzed by practitioner and researcher; and, finally, the results are presented in a manner and form that make them readily understandable and usable by the practitioner to problems at hand.

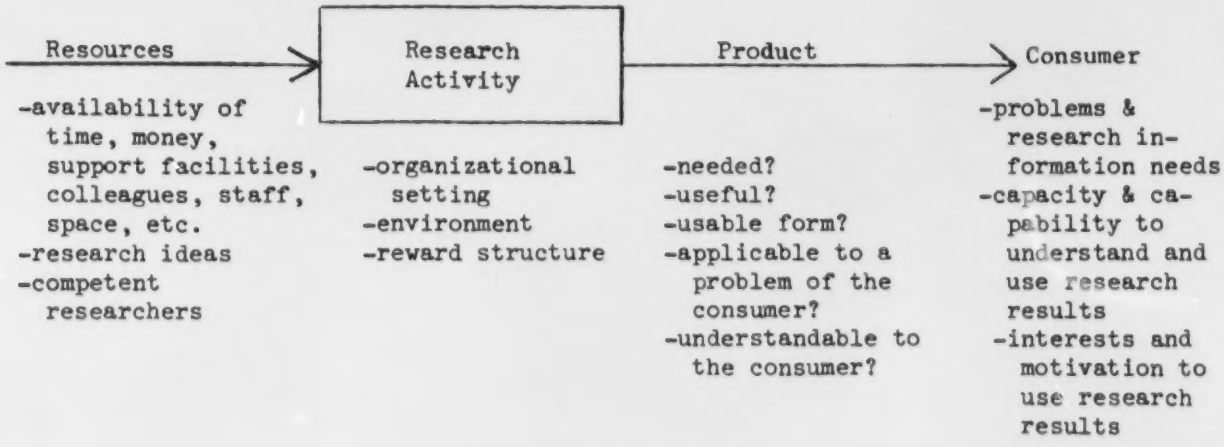
Research for application, then, seems to occur at a level parallel with dissemination of existing findings. It is often incorporated within an overall research and utilization process. It has its basis in the call for information from the applied field, rather than the call from questions generated in applied research. In an era when all social scientists strive for relevance, the term "applied research" may be so overused as to warrant "research for application" being adopted when we speak of the kind of research most appropriate in professional school environments. Havelock's model of "research, development and diffusion" has clear parallels to our concept of applied research. His model is broader in that it includes the dissemination and search for applied research knowledge to be marshalled in a particular situation. Several other models, including Havelock's "problem-solving model," and the "action research model" of Sashkin and Horst, parallel our concept of research for application in some, but not all, respects.[2]

If we were to charge particular departments with responsibilities in these domains, we would no doubt charge the disciplinary department social scientists with raising basic research questions, although they now all have applied branches to which we all look for useful perspectives. We would charge the professional schools with the application of basic research principles in our particular applied areas (applied research) and the conduct of research to address particular questions raised in the practice of the profes-

sional field (research for application). Along with these comes responsibility for dissemination to practitioners. With the latter must also come a process of jointly analyzing problems with practitioners. An analogy in the physical sciences would be the relationship between physics and chemistry as basic sciences, materials sciences as applied research within a professional school (and applied) context, and various forms of structural engineering as the spot where research is marshalled for direct application. Architecture might be another example of a profession perhaps more specifically directed to the application phase of activities that have their base both in problems of doing something and in the application of basic sciences principle.

Barriers to Increased Production and Utilization of Research

To further understand the barriers and answer the questions we have posed, we propose looking at the process of research production and utilization itself. Numerous authors, including Havelock, Sashkin and Horst, Havelock and Lingwood, Menzel, and Dahling have considered the research production and utilization process.3 We believe it is useful to do so once again--specifically, to view the process as one of production and marketing.



Refering to Figure 1, we can decompose the problem of understanding the research production and utilization process somewhat. The issue of utilization can be analyzed from a marketing point of view by concentrating on the output side of the diagram. We need to examine the market--that is, consumers and their needs or wants, and the product that we offer. The production part of the process is examined by looking at the input and throughput sides of the diagram, that is, the resources that are needed and used to do research, the environmental setting in which it is done, and the process by which it is done.

While we are attempting to decompose the research production/

utilization question, it is important to remember that the two are intrinsically linked. There is, in effect, a symbiotic relationship between the supplier and the user. The consumer relies upon the supplier to produce the product necessary to meet the consumer's demand. The supplier relies upon the consumer to purchase and use the supplier's product. As demand increases, so should the value of the product and the production of the product. Furthermore, the producer has the potential of creating increased demand through a variety of marketing techniques.

1. Research producers in the professional educational systems have an inadequate understating of research consumers and their needs, and the research products are often irrelevant to the practioner/consumer. Kirk, Guetzkow, Halpert, and others have identified the gap between researchers and practitioners as a principal barrier to research utilization.[4] Halpert points out that part of the gap is caused by the fact that each approaches what is to be examined from different perspectives. It is often this difference which means that the results of research are irrelevant to what the practitioner was asking about in the first place.

If we were to look at the products and consumers on the output side of Figure 1, we would find that we have several kinds of consumers who have different needs, interests, capabilities, and capacities for purchasing and using our products. A lack of adequate understanding of consumers is one of the major barriers that professional educational programs face in attempting to take action to increase the utilization of research. In essence, we need to do a market analysis, and perhaps engage in some market development. We need to ask: "Why do we want to increase research production and utilization?" "Who will profit from this increase?" "Who are the actual users of our research?" "What research do they need, or are they interested in, or will they find useful?" "How capable and skillful are the consumers in adapting, synthesizing, and using research results?" "Is the research product a product that is needed?" "Is it useful and is the product in a usable form?" "Can the consumer understand and make direct use of it without having to do a large amount of adaptation or synthesis?" Too often the answer to these last three questions is "no." The research that we do often does not have immediate relevance to the social work practitioner, and when it does, we often disguise it and make it inaccessable by being too academic in our presentation of the results.

2. Lack of sufficient motivation and rewards to engage in research. All of us in university life are familiar with the "holy trinity of academia"--research, teaching, and service. This trinity hangs over the heads of assistant professors and other untenured individuals as the criteria against which tenure is to be judged. Similarly it stands in the mission statement of virtually all universities, particularly the larger universities. This trinity represents the three areas into which we divide faculty time and effort. Part of the problem for professional schools seems to stem from the interpretation of these three words, which may stem from the rigidity of definitions of our holy trinity. If a research activity has as its principal beneficiary the improvement of practice within

a professional area, how is that to be recognized? Is it research (it may not have gotten into our most prestigious journal if it lacked markedly different methodological approaches)? Is it teaching (the principal beneficiaries of the act were workers and clients of professional activity who have learned how to better practice the art of their science)? Is it service (since some good came of it and that's the most visible outcome)? Often we believe it is identified as the third, ignoring the essential mission of professional schools and universities. Rosenblatt spoke eloquently on the role of social scientists in mental health education. He identified their ability to have a distance from the ideology of practice and the ability to see things more clearly from afar. He pointed to the classic role of the researcher here--distant and uninvolved in solving the problem.[5] We often think of the role of social scientists in professional schools, however, as teaching research methods courses and publishing papers that none of the faculty read because they are on topics that seem irrelevant or even hostile to the direction of the profession.

3. Educational institutions, such as schools of social work, that operate with a single discipline, rigid bureaucratic structure, and organized curricular areas strongly discourage research and research for application on the part of their faculties. Thompson indicated that any bureaucracy will tend to be monochratic, will stress conformity, and will operate in essentially conservative ways.[6] For a school of social work, an increase in research productivity represents a major organizational change. Its rigid bureaucratic structure, with elaborate committees organized by methods areas or other functional units, will act to discourage research. Its single disciplinary nature operates as a significant disadvantage.

Aiken and Hage noted that as the number of specialties in an organization increased, the openness to innovation within that organization also increased.[7] In a study of medical schools, Carrole identified the fact that the larger the number of specialized departments, the greater the extent of participation of part-time faculty who were concurrently engaged in professional practice, and the more diversified the organizational structure, the greater the research productivity of that institution.[8] Through their specialities, medical schools that are organized around problems of substantive knowledge only, also have created within themselves elaborate structures for the basic sciences. Their structures permit different loci of research among basic science departments versus applied departments. Medical schools, we might note, have identified a significantly differential structure to allow applied research within the field to occur in the "basic sciences," and research for application to occur in more professional, action-oriented subunits. The differentiation of structure permits faculty to act within their own department or across department/specialty coalitions around problems of interest. A greater diversity allows the individual faculty member a greater opportunity to find colleagues to do research.

Social welfare has a duality of composition in its academic

units, as do most professional schools. Having only recently moved into significant levels of doctoral work, the percentage of senior faculty who possess a research orientation or even a research for application orientation within these schools, is smaller than it might be in basic social science departments. This means that when research is introduced as a component in the organization, it engenders high resistance to change. In his excellent review of the literature on resistance to change, Glaser identified five crucial factors that would arouse resistance to change in a professional school, such as the introduction of large amounts of research:[9]

1. Fear of loss of status and prestige or power. Whenever it is introduced in a professional school, research is a means toward prestige.

2. Resistance occurs when there is a threat to job security. As research questions practice wisdom. it clearly threatens a devaluation of the existing knowledge base on the part of those who are not participating in the research.

3. Resistance is aroused when proposed change threatens or challenges currently held beliefs and values. The nature of introducing fundamental research questions by a faculty member in the situation where those questions threaten the teaching area content currently acted upon and believed by faculty colleagues will no doubt create tension and resistance within that curricular area.

4. Fear of loss of self-esteem or sense of proficiency and/or fear of exposure of weak points may be engendered by nonresearchers. A tight bureaucratic structure in which interaction around one's topic of research (when one's colleagues are not engaging in research) creates considerable fear, resistance, and isolation for the researcher from his or her teaching colleagues.

5. People resist changes which they don't understand. Schools of social work, as other professional schools, have a number of faculty who are drawn from practice and who have not been sufficiently familiarized with the research approach being taught in many doctoral programs in the social sciences or social professions. Failing to understand this approach, they will resist reorientation of educational efforts to utilize research.

Thus our thesis is that the introduction of large-scale research activities into professional schools which have not had that activity is essentially threatening. The researcher is perceived as a threat by senior colleagues, and research activity organized around areas of teaching is threatening to the knowledge base of those individuals in educational organizations. This is particularly true when the skills of the nonresearch-oriented faculty derive from earlier learned, but less empirically validated theories and practice wisdom.

What becomes threatening in a school of social work or other

single disciplinary professional school is that the individual researcher must work every day with the same set of colleagues who claim to have knowledge regarding the individual's area of research. One seriously experiences difficulties if he or she is engaged in research that disagrees with the theoretical base of the chairman of the sequence. There is little alternative organization for the individual faculty member to look for as a source of support or as an avenue for outlet. In many schools where research productivity is low, this creates a self-defeating cycle that further inhibits academic productivity, as well as meaningful research for application activities on the part of the school.

A third barrier to increased production and utilization of research then, appears to be the structure of single-discipline schools of social welfare or social work. They tend to be highly bureaucratized and organized in ways that force research activities to operate as a direct threat to less research-oriented faculty members.

In examining how the professions have addressed this problem, the medical school example discussed by Carrole may be most helpful.[10] A diversity of departments, extensive use of joint appointments, and part-time faculty involvements may be three useful strategies. A fourth strategy, which we propose, is the creation of organizational structures that would provide flexibility and change in the working relationships among faculty. Such structures would provide alternative sources of reward and collegiality for faculty when they are pursuing varied purposes of research, research for application, teaching, and service. It is our belief that matrix organization theory and concepts of project managment through research for application centers--which are discussed below--may provide additional useful vehicles to overcome innate disincentives in small, nondepartmentalized, yet bureaucratic schools of social work.

4. A lack of organizational components focused on application-oriented research. Throughout the literature on research utilization, there is a focus on a gap, a bridge between researchers and practitioners. In those instances we look to the individual researcher or practitioner to create that bridge. This is a bridge, we might add, that neither the researcher nor the practitioner will receive organizational rewards for building. It is a bridge that takes a structural rigor which goes far beyond any single individual's efforts. Havelok and Lingwood addressed the need to develop a research, development and utilization system that includes: a mission-oriented research program; a dissemination service; a problem-solving consultation service; an instant response retrieval service; a rapid response report service; continuous flow dissemination; user-centered research; and a natural network nurture process.[11] All of these must be addressed in one way or another to keep the bridge between research and practice open and functioning. None of these can operate in an organizational vacuum.

Too often, however, the most logical vehicle for these appli-

cation-oriented efforts--the university--is structured in ways contradictory to those processes. Alternatively, the schools actively discourage through their bureaucratic structures the conduct of research, and particularly research for application. On the other hand, if research is encouraged, it is encouraged on a basic social science model. The output sought is publication in social science journals, and the needed expansion of a knowledge base in an applied research area as differentiated from research for application. That which carries prestige, even in our applied fields, is research whose application is national rather than local or regional. Such research can be conducted equally well and perhaps better in departments of sociology, psychology, or political science.

The creation of centers that serve the research and information needs of the professions is a unique responsibility of professional schools, a responsibility often rejected. There have been repeated calls in the area of education, vocational rehabilitation, and criminal justice.[12] A few such centers have been developed, often focused on a particular area of practice. However, such centers often are looked down upon in their home environments. They don't seek publication in the prestigious and standard journals; instead, they help practitioners. If their source of support is federal, their focus is single rather than general. They still may not legitimately receive requests for solution-oriented research from practitioner groups. It is these very requests that maximize the applicability of research undertaken, its impact on professional practice, and in the long run its generalizability. Such centers, however, must remain fiscally dependent, at least in part, on the effectiveness of their efforts within the practice community. The research output they make must be application-oriented, and often may not result in traditional journal publication. It is this type of research, however, that can most affect not only the application in social welfare organizations of research knowledge, but the intellectual climate of the professional educational institution.

5. Lack of dissemination outlets and poor reward structures. In modeling our research efforts after the social sciences rather than after other professions such as medicine and engineering, the human services professions systematically have eliminated opportunities for the publication of application-oriented material. In 1968, Klein proposed development of dissemination mechanisms for the human services, particularly for social welfare, in a Reader's Digest type format.[13] The more one thinks about that, the more frightening it becomes. Many of the journals in the field of social welfare already read like the Reader's Digest. Most particularly they read like amusing and inspirational "anecdotes in my life." What I think Klein was addressing, however, was the great possibility of opportunities for publishing reports of application-oriented research. Unless a study has a unique methodological interest--an interest of greater impact for the researcher than the practitioner--there is little opportunity in the research-oriented journals for the publication of "research for application" activities.

New journals such as Evaluation, which is identified as a journal for human services decision-makers, Administration in Mental Health, also focused on the communication of research based on news of decision makers, and Innovations, for the dissemination of practice innovations to practitioners, represent a much-needed higher caliber outlet. The opportunity is rare indeed for broad dissemination of research for application findings. The research-oriented journals in the field of social welfare have to date been skewed toward methodology and national policy, and to the creation of basic "applied" theory for the professional endeavor. This is not necessarily inappropriate, but what it means is that those rewards of academia (the holy trinity of research, teaching, and service) do not go to the individual who is engaged in research for application, since he or she does not receive due credit for what is probably the most important type of profession-oriented research--that which results in a change in professional practice.

The barrier here then, is really twofold: first, a lack of opportunity for broad dissemination. This is being improved, but still remains. Secondly, a lack of a reward structure for the individual faculty member pursuing the most immediately meaningful type of research in his or her field. It is odd that the same set of senior colleagues who fear the production of research often will discount all forms but the most traditional of research productivity in reviewing candidates for tenure and promotion. In a way, this may be "identification with the aggressor"--unless we adopt the existing model of the social sciences, we fear nonacceptance by our university colleagues as scholars.

With such disincentives to application-oriented research productivity, it is small wonder that the faculty member, though oriented to research for application, moves quickly to either little research productivity on the one hand, or highly traditional social science-oriented research activities on the other.

6. We adopt models of teaching research in beginning professional programs that ill-prepare practitioners for the meaningful uses of research for application. We are sure that all participants in this conference and most readers of this volume have heard only too often that schools of social work (and social work undergraduate programs) are to produce "consumers of research." Our accrediting standards support this notion and our curricular rhetoric supports it, but it remains ill-defined as a concept. The skill and knowledge bases are ill-specified (if they exist at all), and the basic orientation and tools available to us make it impossible to accomplish meaningfully the objective of developing skilled consumers of research. What is worse, having ill-equipped consumers at the baccalaureate and master's levels will further complicate the problem with our preparation of scholars at the doctoral level.

We seem to have few alternatives in our research courses but to teach extremely watered-down versions of basic social science research methodology to students.[14] Through these efforts, we hope that they will learn to read journal articles critically. We may try

to have students undertake the design of a research project, or at the master's level, even pursue a thesis so that they can demonstrate their working knowledge of research and thereby prove that they can be good consumers thereof. We are, then, not at all surprised when our would-be consumers never come to the school again with a research question, but only with claims of its irrelevance to practice.

What seems to be lacking is that which Halpert referred to as a common definition of what the problem is that needs addressing by researchers and practitioners.[15] When researchers teach research, they teach a method. They expect students to know techniques of survey design, sampling statistical inference, and so on. What practitioners experience are problems in practice--problems for which they cannot articulate what statistical inference might help or what method of sampling might relate.

At both the baccalaureate and master's level, what needs to be emphasized is a problem-analytic approach rather than techniques of doing research badly with inadequate preparation. While we all spend our first five lectures on defining the problem, we rarely discuss how this is done in a meaningful pattern of interaction between the person who has a problem and the person who has the techniques for gathering information. We fail to address the information needs of the practitioners for which research could be a tool, or to give our future practitioners a perspective with which they can see how to frame (for the distant researcher) an answerable question in quantitative form. At the baccalaureate level this should be the focus of curriculum efforts. Since so little of what we publish in journals has direct meaning for practice (if you accept the premise we posit above) the notion of teaching baccalaureate and master's level workers to read critically that irrelevant material doesn't seem to help the problem. Similarly, since we often will not give the students enough methodological basis to actually conduct application-oriented research on their own, teaching them watered-down methodology perhaps does more harm than good, only heightening its irrelevance to both practice and knowledge development.

At the master's degree level, given an age of accountability and the potential of evaluative research for providing meaningful information for management, seriously addressing management information and evaluation research approaches that can be used in small agency or program settings would seem to be a meaningful way to orient the practitioner to the potential use of research in addressing his or her problems. More fundamental than this, however, would be the ability and skill to identify practice problems. Such identification is where information (drawn from research, literature, or anywhere else) can be of assistance and where the framing of a meaningful, researchable, simply answerable question can be a mutual task for researcher and practitioner.

At the doctoral level, the difficulty is compounded. When badly trained practitioners in research return for advanced study, the

unlearning that is necessary to complete the single, arduous research task of a dissertation seems to far exceed the amount of learning of strong research methodology that can be absorbed. Most doctoral programs spend a substantial portion of their time trying to convince the advanced professional seeking training and scholarship in his or her field that what they earlier learned and experienced about research isn't really true. Similarily, the fear of this unfamiliar area for the practitioner becomes almost debilitating, making the length of time doctoral dissertations take in many cases embarrassingly long. If one built on a strong base of problem analysis, a meaningful dosage of information utilization and evaluation for utilization in practice, then a strong basis in research methodology could be provided for the advanced student.

As we fail to reward research for application in our academic structures, so too in our effort to prove ourselves academically worthy of being in the institution of higher education at the doctoral level, we often refuse to accept rigorous problems that have direct remedial implications for practice. Hence the dissertation process becomes one which further reinforces the inapplicability of research to the meaningful problems that this advanced professional wished to address when he or she entered doctoral study. Significant curricular refocusing in the area of research would seem to be needed to address this barrier.

7. Our curricular experiences tend to be oriented around "profession" rather than around "problem." Fairweather addressed the importance of an interdisciplinary environment in helping to frame innovative approaches to problems and research productivity in applied areas.[16] The isolation of the students' experience in single disciplinary situations (where there is perhaps overcommitment to an ideologically based approach to problem solving) may often discourage the exploration of questions for which research can be a meaningful tool. The same fears and threats that our non-research-trained faculty experience in dealing with new colleagues trained in research methodologies are shared too often by students at all levels of preparation.

8. Accreditation provides no incentives for increasing the research sophistication of the field. While we acknowledge that in review of curricula at the baccalaureate and master's levels, the Council on Social Work Education does have statements with regard to preparation of consumers of research and the need for curriculum content addressed to that, there are no incentives created by the accreditation process for increasing the quality, quantity, or applicability of research at the graduate or undergraduate level in social welfare education.

In many major universities and in professions such as engineering and medicine, a necessary criterion for the establishment of graduate work is the academic productivity--the research scholarship--of the faculty. Accreditation questions tap a dimension regarding whether the research activities of the faculty create a sufficient

environment for graduate professional study for students. If the only research ongoing at an institution involves projects undertaken so that students can complete their research requirements, the students will have the greatest affirmation of the irrelevance of research to improve social practice. If the students' role models, their professors, are actively engaged in researching meaningful questions in their areas of specialty, evidence of the relevance of research to the professors will be gained.

Oliver and McNeely, in examining incentive structures for the inclusion of minority content in social welfare curricula, said that merely calling for a school to include particular content does not bring meaningful material into the classroom. They suggested instead an accreditation standard that calls for rewarding the faculty members who comply with the mandate to the profession.17 Whether an accrediting standard calls for productivity by an institution or for incentives prompting research activity by the faculty, it is imperative that the Council on Social Work Education begin to recognize that research activity at the graduate level (and hopefully applied research for application activity) is a necessary part of the students' environment. At the undergraduate level, while it is desirable and to be encouraged, the involvement of faculty in meaningful research for application is perhaps not as necessary for curriculum and educational programming. Here the emphasis should again be on meaningful problem formulation by faculty, students, and professionals. If we are to differentiate meaningfully between these two levels of practice, we should note that in other advanced professions the graduate level seems to be distinguished by an environment that is centered around research.

The parallels to engineering should not be overlooked. The first university-affiliated school of social work was called a School of Applied Social Sciences. Many engineering schools have their basis in a School of Applied Sciences and Technology. If we think of preparing social engineers as one of our objectives, then our role in the preparation of meaningful research consumers perhaps may become clearer.

Alternative Strategies for Increasing Research for Application in Professional Schools

In the following section we will present three general strategies that may be adopted by schools of social welfare and accrediting bodies of professional associations to increase both the quality and quantity of application-oriented research activity and other components of research utilization. While our ultimate efforts must be aimed at the individual student/practitioner and the individual researcher, we feel that the most neglected area in our field has been the organizational. We shall start here.

1. Create organizational patterns in schools of social welfare that will allow for: (a) time-limited project involvement,

(b) multiple and overlapping interactions among faculty around research questions, (c) a focus on research and research for application activities, (d) interdisciplinary involvement, and (e) involvement in the formulation of research questions with practitioners. Recently a number of schools of social welfare have created application-oriented research centers independent of any single focus or mission with regard to area of substantive inquiry. In each case these have been initiated as small components of ongoing established schools--schools that suffered many, if not all, of the barriers to research productivity described above. In the past seven years, experience in these centers has been growing and attention to them increasingly has become a concern to the field of social welfare. Roundtables on this topic have been held at the CSWE Annual Program Meeting during each of the last three years, and a recent conference at Case Western Reserve University brought together representatives from schools and colleges of human services professionals who were currently involved in, or in the developmental stages of, applied research centers.

In each case there seems to be five major characteristics of these centers:

1. An emphasis on application.

2. Considerable involvement of part-time faculty and staff in its specific projects.

3. Fiscal and programmatic dependence on local and state constituencies as well as on national funders in the definition of problems and initiation of projects.

4. Involvement of practitioners in the formulation and completion of projects.

5. A flexible organizational structure within the organizational component and between the organizational component and the school.

Concepts of project management seem to have particular relevance for the successful pattern of organization of applied research centers in schools of social welfare. Time-limited efforts focused on specific results or solutions, which draw upon ongoing organizational resources (both personnel and non-personnel), and which bring mutually supportive people together in a structure to accomplish a task seem to characterize the operating style of these centers and their linkages to academic programming. Through the construction of ad hoc or project teams, resources beyond the boundary of the particular school of social welfare also can be drawn upon. In addition to academic disciplines that may be involved, practitioners may be involved in the formulation-identification of the problem of information gathering.[18] This practitioner involvement also can be in the implementation and follow-along phases.

Through a project management structure, the expertise of existing

faculty members can be recognized and brought into the research process. A matrix organization can be a meaningful way to involve the fullest range of faculty in the solution-oriented research activity.[19] It can draw positively on the resources of all members of the organizational environment of the school. It does not create an isolation for those who do research as opposed to the rest of the faculty either as an elite or as a hostile component of the organization. All faculty have an opportunity to participate meaningfully and contribute what they have to offer in some aspect of problem formulation, research implementation, or application. This serves as a means to reduce the threat, and hence the resistance, to research for application productivity in schools.

The matrix organization approach also provides an opportunity for a flexible structure which can provide concurrent support to the researcher and his or her interests, a focus on application, and an opportunity to insulate his or her research activities from threatening or disrupting his or her teaching activities. In a rigid bureaucratic structure one always works with the same people. In an interdisciplinary project drawing on various components of expertise of a broad range of faculty and staff, and opportunity for student involvement of a temporary nature can be created. The solution is quickly verified in practice and the relevance of basic theories and practice wisdom can be positively and meaningfully considered in the research effort.

A matrix approach allows for fiscal support of projects of variable size and scope. In addition to being able to offer varied types of opportunities for participation by faculty, staff, and students, a matrix approach allows an organization the flexibility to add or substract particular resources as they are needed to accomplish a specific objective. With the height of consideration of tenure in academic institutions, an approach that explicitly talks to temporary involvement of individuals in accomplishing objectives helps to avoid the "two castes" character of the educational environment, which often acts as a disincentive to involvement of practitioners in research application activities.

A matrix organization allows for relatively easy entry and exit of faculty members in particular research activities and varied teaching activities. By providing a diversity of activities, it provides the greatest opportunity for individual faculty members to complete all three missions--research (hopefully now including research for application), teaching, and meaningful service to the professional community.

The existence of a matrix structure and its recognition within a professional school also allows a greater sharing of power among the faculty. An individual's power base need not be his or her position as a senior faculty member or chairman of a particular committee. An individual can have an opportunity for leadership on a project--an opportunity to test and develop skills in research application, teaching, or other activity as it relates to a particular project rather than to a particular status. This is particularly

productive for young faculty members whose information and skill base is high, but whose power base in the traditional academic organization may not allow for their resources to be fully utilized.

The application of project management concepts beyond the single professional school into the interdisciplinary environment of professional and social science education at the college or university level seems particularly attractive as a means to increase not only productivity, but relevance of the institution to the needs of the community, at the same time not threatening the organization or integrity of disciplinary oriented curricular efforts.

Matrix management approaches also offer opportunities for greater interdisciplinary collaboration among students in research and application-oriented settings. The matrix organization pattern of professional schools allows not only for the organizational flexibility, but for the varied sources of fiscal support on which a modern school must draw if it is serious about research and research for application initiative, the opportunities for reducing threat among the faculty and involvement of practitioners as meaningful partners, and, in appropriate aspects of the project, as leaders in the application effort.

Matrix management allows the concurrent operation of research for application focus and applied research addressed at more basic questions of the application of social and management science theory and knowledge to human services settings. It allows us, then, to operate in the fullest range of professional school research roles. It allows professional schools to draw on the productive involvement, in appropriate areas of basic social and management science, of faculty colleagues, staff, and graduate students. It allows opportunities for expanded interdisciplinary involvement, often raising new questions to be addressed by project teams. While not explicitly stated in any of the major research for application centers developed in social welfare, several characteristics of the matrix organization do appear to be present, including the flexible structure, multiplicity of projects, varied nature of projects, and heavy emphasis on application that involves practitioners.

2. Increase the legitimacy and extent of dissemination of research for application. Opportunities for expanded dissemination of research for application are needed. Many professional societies that publish journals constantly endeavor to identify on which side of the practice or research dichotomy they stand. In total, efforts such as Evaluation, Administration in Mental Health, and the Journal of Social Issues still represent a relatively small proportion of academically respectable outlets for professional scholars. Expansion of the opportunities and legitimation of contributions in research for application by promotion and tenure committees must be forthcoming. As a strategy, we would suggest the use of editorial review boards for research for application reports and disseminations. Many of the major social welfare research centers now have monograph series that provide for the sharing of findings, innovations and

application methodologies broadly within the field of social welfare. These, however, are not refereed journals, and the contributions of faculty to these efforts often are not recognized. Such centers should adopt editorial review boards to assess the meaningful contribution to the field of such research for application publications. Similarly, other forms of dissemination as created by the research for application scholar should be able to be assessed against national standards of excellence through such review boards to serve as meaningful criteria for the research part of the trinity of tenure, promotion, and fiscal rewards that the academic life can offer.

Schools of social welfare and the professional associations should seriously consider the creation of dissemination vehicles such as Evaluation and Administration in Mental Health as a core aspect of their publications programs. There is a natural tendency for journals that speak to research for application to apply standards of either the traditional social sciences or of purely professional interest in their editorial review. It is the creative mixture of these which seeks rigorous application of rigorously gained knowledge that must be the focus.

3. Accredit educational activities related to research. The Council on Social Work Education should seriously consider adopting at the graduate level a standard of accreditation that examines the level of research/research for application activity which is a meaningful part of the graduate student's environment, as a necessary criterion for accreditation of an institution as a facility for advanced professional study.

It may alternatively seem heresy to propose that a school's accreditation as a graduate institution should stand on the quality, quantity, or extent of research effort being undertaken by that institution, since it is curriculum that we traditionally evaluate. One must seriously question what the difference is between graduate and undergraduate education in social welfare (or other human services professions) if it is not related to the questions of evaluation of one's activities as well as the development and application of knowledge that should occur at the graduate level.

We draw comfort from the application of such criteria in looking at medical education. In the applied physical sciences, standards are an understood criterion. Now that we do function with two recognized levels of entry into professional practice and of professional education, the research role of the advanced level should be supported and even insisted upon by the profession and its accrediting bodies.

Accreditation should insure that there are appropriate incentives and rewards, to the extent that this is legitimate within the accreditation function. We believe that research should be reflected in our standards to the same extent that curricular requirements, library requirements, and faculty and student mixture requirements are identified as necessary for the preparation of well-rounded professionals. At the undergraduate level, the accreditation standard

should focus less on the content of a research course and more on the commitment in professional education to a research-based analytic approach that would make research a relevant component in the practitioners' search for information and guidance. Curricular innovations and research that CSWE pursues should include the development of curriculum materials on program evaluation for graduate-level students and the development of curricular support materials on problem orientation for use at both levels of beginning professional education.

In summary, the strategies we propose are largely organizational.

1. Schools of social welfare should create flexible structures that permit project-oriented involvement of a diverse set of faculty along with practitioners and members of other disciplines toward the solution of problems through the application of research methodology. (Here we suggest matrix organization theory and the creation of application-focused centers dependent, at least in part, on support from the practice community.)

2. Schools, professional associations, and accrediting bodies should initiate rewards and opportunities for dissemination of research for application productivity. Schools, particularly those with application-oriented research, should include an assessment of the meaningful contribution of research for application as a criterion for promotion and tenure.

3. The profession, through its professional accrediting body, should acknowledge the necessary research-for-application base of advanced education through adoption of an accrediting standard that seeks to document the presence (not the topics) of research activity sufficient to warrant an environment for preparation of advanced professionals.

While they may not be startling, and they often are repeated in one form or another throughout the literature on research utilization, these organizational tactics might create an environment that would produce students better prepared for the tasks appropriate to their roles as practitioners and research users, while also providing the environment and incentives for faculty to become better and more prolific research producers.

NOTES

1. Harold P. Halpert, "Communications As a Basic Tool in Promoting Utilization of Research Findings," Community Mental Health Journal, Vol. 2, No. 3 (1966), pp. 231-36.

2. Ronald G. Havelock, Planning for Innovation Through Dissemination and Utilization of Knowledge (Ann Arbor, Mich.: Institute for Social Research, University of Michigan, 1969); and Morris M. Sashkin and L. Horst, "A Comparison of Social and Organizational Change Models: Information Flow and Data Use Processes," Psychological Review, Vol. 80, No. 6 (1973), pp. 510-26.

3. Ronald G. Havelock, "Translating Theory into Practice," Rehabilitation Record, Vol. 10 (November-December 1969), pp. 24-27; Sashkin and Horst, op. cit.; R. G. Havelock and D. A. Lingwood, R & D Utilization Strategies and Functions: An Analytical Comparison of Four Systems (Ann Arbor, Mich.: Institute for Social Research, University of Michigan, 1973); Herbert A. Menzel, "Scientific Communication: Five Themes from Social Science Research," American Psychologist, Vol. 21 (1966), pp. 999-1004; and Randall L. Dahling, "Shannon's Information Theory: The Spread of an Idea," in Studies of Innovation and of Communication to the Public, Studies in the Utilization of Behavioral Science, vol. 2 (Stanford, Calif.: Institute for Communication Research, Stanford University, 1962), pp. 117-40.

4. Stuart A. Kirk, "Understanding Research Utilization in Social Work," supra, pp. 3-15; Harold Guetzkow, "Conversion Barriers in Using the Social Sciences," Administrative Science Quarterly, Vol. 4 (June 1959), pp. 68-81; and Halpert, op. cit.

5. Aaron Rosenblatt, "The Practitioner's Use and Evaluation of Research," Social Work, Vol. 13 (1968), pp. 53-59.

6. Victor A. Thompson, "Bureaucracy and Innovation," Administrative Science Quarterly, Vol. 10 (June 1965), pp. 1-20.

7. M. Aiken and J. Hage, The Relationship Between Organizational Factors and the Acceptance of New Rehabilitation Programs in Mental Retardation (Washington, D.C.: Social and Rehabilitation Services, January 1968).

8. Jean Carrole, "A Note on Departmental Autonomy and Innovation in Medical Schools," Journal of Business, Vol. 40 (1967), pp. 531-34.

9. Edward Glaser, ed., Putting Knowledge to Use: A Distillation of the Literature Regarding Knowledge Transfer and Change (Los Angeles, Calif.: Human Interaction Research Institute in collaboration with NIMH, 1976), pp. 40-41.

10. Carrole, op. cit.

11. Havelock and Lingwood, op. cit.

12. See N. E. Hearn, "ESEA Title III: A National Model of Knowledge Utilization and Dissemination" (Paper presented at a meeting of the American Educational Research Association, New York, February 1971; G. A. Engstrom, "Research Utilization: The Challenge of Applying SRS Research," Welfare in Review, Vol. 8, No. 5 (1970), pp. 1-7; and Havelock, "Translating Theory," op. cit.

13. Helen D. Klein, "The Missouri Story: A Chronicle of Research Utilization and Program Planning" (Paper presented at the National Conference of Social Welfare, May 1968).

14. Kirk, op. cit.

15. H. P. Halpert, "Research Utilization: A Problem in Goal Setting--What is the Question?" (Paper presented at a meeting of the American Public Health Association, Atlantic City, November 1972).

16. G. W. Fairweather, "Experimental Social Innovation Defined," in Social Intervention: A Behavioral Science Approach, ed. H. A. Hornstein, B. B. Bunker, W. W. Burke, M. Gindes, and R. J. Lewicki (New York: The Free Press, 1971).

17. John Oliver and Roger McNeely, "Two Perspectives on Organizationally Inspired Barriers to Innovation in Schools of Social Work: Short and Long-Term Strategies to Promote National Minority Group Representation," Journal of Sociology and Social Welfare, Vol. 5 (July 1978).

18. Gregory M. St. L. O'Brien, "Research Utilization in Program Design: A University Center's Role in Service Delivery Innovation," Welfare in Review, Vol. 10, No. 2 (1972), pp. 1-10.

19. For a more complete discussion of project management and matrix organizations, see D. I. Clelland and W. R. King, Project Management at the Matrix Organization (New York: McGraw Hill, 1975), pp. 183-202.

SOCIAL SCIENCE KNOWLEDGE AND SOCIAL WORK PRACTICE

by Martin Rein and Sandra Tanenbaum

This essay will examine the interplay between social science knowledge and professional practice. We need briefly to elaborate on this conventional distinction between purely factual and pragmatic, action-oriented knowledge. In this view, when we theorize about an issue, we are asking the question: "What is the case?" and are looking to factual knowledge for the answer. We can ask the question on various levels. We can explore here-and-now concerns; or we may pursue the question of what is the case generally or universally, with possible applications to as yet unspecified situations. In science, theory is addressed both to the concrete here-and-now and to the law-like generalities underlying the concrete phenomena. These two levels are, of course, related. Once given law-like regularities, we are able to derive many specific implications. Similarly, an understanding of the specific stimulates us to identify the general case.

To ask the question "What is the case?" is to theorize, and theory in social science looks to fact statements rather than value statements. It seeks knowledge that is positive or scientific rather than metaphysical or speculative--that is, knowledge that is anchored in controlled observations. These, in turn, are used to construct general models or laws. In social science, the relevant models describe interactions between human groups and between human actors and the nonhuman environment.

In practice situations we ask the question: "What is to be done?" Practice, which requires action-oriented knowledge as contrasted with a theoretical point of view, looks to facts not only insofar as they are ascertainable or true, but as they impinge upon human goals, interests, and objectives. In the social sciences, these are goals not of purely private import, but of public significance.

A distinction we would like to draw in this connection is one between policy making and policy implementation. On the former level, we find various categories of policy makers: legislators, executives of social agencies, and so on; on the latter, we are more likely to find practitioners--for example, educators, medical personnel, social workers, and the like. Thus we can divide the institutional roles relevant to our topic into two basic categories: policy-makers and practitioners. The term "practice" will be employed in a narrow sense, referring to what the practitioners charged with implementing policies are doing.

It is here, with questions of "What is to be done?" that the need for applied or policy-relevant social science arises. Social science of the applied type is supposed to provide a rational and hence consensual approach to controversial issues of public significance, because by marshalling the relevant facts it narrows the range of disagreement among contending groups and thus facilitates agreement among divergent goals.

When knowledge and action are considered dichotomous, the central problem appears to be how to forge a link between them. We believe that knowledge and action are intrinsically interrelated, and that exploiting the intricate links between them is a fascinating epistemological problem that is central to policy analysis. Our primary concern in this essay is with the relationship between social science knowledge and social work practice--one expression of which is the application of scientific findings to practice problems or, as it is sometimes called, the applied science model.

The Applied Science Model

It is a widely held view among American social scientists, policy-makers, and the general public that whenever society is in the grip of some grave practical difficulty (what is to be done?), a satisfactory solution can and will be found with the help of scientific research (what is the case?). Applied research can determine the merits of any proposed solution. One form that this model takes is the demonstration or experimental project. These projects show that the program in question is both feasible, in the sense that it administratively and politically can be put into place, and effective, in that it will realize the social benefits expected from it. Demonstrations consist of creating a prototype that is replicated, with only minor variations, in a variety of settings. In this view, social programs are like widgets, to be produced in the laboratory, tested in the field, and then mass produced when performance impediments are eliminated.

The crucial role for research here is to monitor the demonstration so that scientific knowledge about its performance can be gathered. This requires control groups, random assignments, and measurable variables (all of which are necessary if general inferences are to be drawn), and a general theory about the components of the program and how modifying these components brings about intended purposes. Optimally, scientific review of the prototype's performance determines, in cases of failure, whether the underlying conception was faulty or whether poor implementation prevented the idea from getting a fair test.

A good example of the applied science model is the research and development effort that preceded passage of Title VII of the Older Americans Act, the Nutrition Program for the Elderly. Federally funded scientific research both assessed the nutritional status of older persons and measured the effect of pilot nutrition projects. Findings were used to press for passage of Title VII and were reflected

in both legislative intent and guidelines for program implementation. Monitoring and evaluative studies continue to play a role in the program's operation. Science thus informs and legitimizes policy and practice.[1]

These are problems with the applied science model. Although it posits a natural continuum between theory, research, and practice, research is often likely to receive quite discontinuous treatment. A breach between research and practice is created when social research questions develop in a vacuum and are answered in a severely controlled and standardized laboratory-like environment; research acknowledges the rough and tumble issues of the real world, but remains sheltered from it. In addition, the methodology governing certain large-scale experimental research projects is simply unrealistic. It assumes naively that experiments can be protected against the turbulent environment in which they function. Social science is thus forced into a rigid mold that leaves us with a severely impoverished understanding of experience or practice and a reduced ability to develop meaningful and fruitful hypotheses and generalizations.

Another version of the applied science model assumes that social science knowledge is cumulative and convergent and that we already have reached a position where we can formulate general principles that can be of practical value to practitioners. The work of Rothman provides an obvious example of an attempt at systematically culling the social science literature in search of general principles to guide everyday practice.[2] He is not alone in his faith in the usefulness of this approach. Etzioni has attempted in his recent work to isolate the boundary between determinism and voluntarism in the performance of social systems.[3] He believes that we need no longer remain prisoners of the givens in a situation, but that we know enough to identify effective levers for change. Of course, in some situations we lack know-how; in other situations we know what to do but lack the power to implement our knowledge. But even in institutions where we lack knowledge and power, it is possible to develop principles for intervention. He cautions us to protect ourselves from both hyperoptimism and despairing pessimism. Effective thinking can serve as a lever for changing practice situations, and social workers may seek this in social science knowledge. In particular, Etzioni believes that social workers should be instructed to be less psychological and individualistic and to pay more attention to the social dimensions of power and organization; these, he feels, can be reformed most of the time, if we make a reasonable and informed effort to do so. In brief, then, pumping more social science knowledge into the formal education of the practitioner is thought to improve substantially the quality and effectiveness of practice.

Such a formulation is conventional wisdom, but we consider it incomplete. First of all, practice-related skills vary widely; some practitioners' functions require rigorous intellectual and technological preparation, while others call essentially for on-the-job

training. The one-sided emphasis upon sophisticated, high-level "professionalization" seems misplaced. It is important as well to explore qualifications of a different kind. For example, our social service organizations would surely function better if so-called human qualifications were more widely recognized and rewarded. But most important, the emphasis on know-how ignores the crucial role that ambiguities of power and myth play in practice.

We believe, then, that one of the esential weaknesses of the applied science model is that it fails to address what is most essential in practice. Therefore we need to examine what practice is, and then to inquire what kind of knowledge is relevant to it.

The Nature of Practice

By practice, one may understand the entire domain of human action, that is, praxis. Such an interpretation, however, would take us far beyond our interest in research applied to social legislation and its practical implementation. In this essay, therefore, we will concern ourselves not with practice in general, but with the social programs created within a given institutional setting and the research that serves to clarify the issues they raise.

Practice becomes the topic of social research because the existing institutional pattern of our society allows for policy making as a special function, and practitioners as a recognized category of individual or collective actors. When socially relevant activities are automatically regulated by tradition (that is, by skill or social behavior codes learned in the family), we speak of custom, but not of professional practice. Practice arises when behavior is regulated or coordinated on a nontraditional basis. What is crucial to our understanding of practice is that it is a field of activity that includes those relationships and only those relationships which arise in an institutional setting. Policy makers and practitioners act in definite relationship to one another and to others playing institutionally defined roles.

We believe that practice requires a more comprehensible formulation than it is generally given and that common notions of practice need to be differentiated. Practice is grounded in the purposes of the practitioner, and since practice is institutionally based, in the directives of those in authority. Effective practice also is grounded in the desires of those being served. It may be conceptualized as a craft--that is, as a skill that is sensitive to the exercise of power. The knowledge which informs practice is highly diversified. It is information to be sure, but the data are organized by guiding principles. Thus practice consists of both knowledge and action. Strategies for production and use of social science theory and research in modifying practice must consider its component parts, its subtle mechanics, and its complex informational base. We consider the essential elements of practice to be (1) a set of purposes and values, but an essential ambiguity of mission; (2) questions of power and authority always are present; (3) skill in

order to be effective; (4) craft for effectiveness as mediated by power; and (5) action-organizing myth.

Not all efforts at putting intent into effect fall within our more restricted interest in professional practice. We would like, then, to distinguish practice from praxis. Praxis is a more encompassing concept, what man does as opposed to what man thinks--that is, the world of action as distinct from the world of contemplation. Practice, in our use of the term, is restricted to what professional and semi-professional practitioners do. Yet practice and praxis share much in common; the former is a manifestation of the latter. We are attempting to develop a conception of practice which is narrower than that of praxis, yet broader than that of skill. It is designed to capture something of the way in which practitioners actually carry out tasks in an institutional setting, rather than an idealized version of practice, abstracted from the context in which it functions.

Yet even if we define professional practice as action that is institutionally defined and that involves all of these elements, we are still faced with a whole range of varied phenomena. The skills required for practice differ widely among, for example, medicine, education, and social work, and practitioners' activities also vary with the levels they occupy in an institutional hierarchy--for example direct practice, supervision, administration, planning, and policy making. We can distinguish professional activities both by level of skill and position in a stratified system. Some students of practice differentiate between the major and minor professions on the basis of level of skill required and by distinguishing administration and policy making from direct practice.[4] We are striving for a level of abstraction that distinguishes praxis from practice, yet does not create artificial distance between them; that treats as loosely comparable the considerably different professional practices which exist on every skill level and hierarchial stratum. We believe some useful generalizations can be made at this level. Our discussion, as we have said earlier, is inspired, however, by our interest in the practice of the minor professional who works as a street-level bureaucrat.[5]

Practice in an Institutional Context: Ambiguity of Mission

As we have stated, the intent and action of practitioners operate in an institutional context. The institutional aspects of the interaction between practitioners and their reference groups (policy makers, professionals, clients, and the general public) are of central importance.

The degree of congruence between the policy maker's intent and its execution in practice often is low. Practitioners not only carry out other people's intent, they also internalize societal norms as their own. They have their own conceptions of the goals served by their activity and the ways in which the goals might be attained. Basically, they also possess a personal identity and ethos.

All these forces emerge when we examine policy and practice within a social or institutional context. While it is true that what the practitioner does generally reflects the policy makers' intent, the contribution of the former to policy making also is important and sometimes crucial. But in acknowledging this point we do not mean to obscure the fact that the role of the practitioner is not equivalent to that of the policy maker; it is the latter who deals with basic directives for what occurs and who gets what under what circumstances. Yet the collective power and influence of practitioners never sinks to zero, widely variable as it is, and the power of both practitioners and clients is enormously increased when they act in concert.

In discussing social work practice, we can identify at least three sociologically relevant reference groups: the practitioners, the clients, and the social agency boards of directors. How these three reference groups relate to each other and to the general interest is an elusive but urgent issue in practice. We would argue that the policy maker and practitioner generally look upon themselves as brokers among different interest and opinion groups. They assume that their own allegiance is to society as a whole and not to any segmented solidarity group, such as social class. They view themselves as promoting goals that can be legitimated in universal terms, because they are in the service of the entire social universe. This perspective is in a sense "loaded," since it assumes that policy makers and practitioners have all the relevant values and that the practitioner may simply execute policies bred of the general interest.

Purposes are far more complicated and uncertain. Practitioners experience considerable ambiguity and ambivalence surrounding their mission, and these uncertainties produce dilemmas for practice. If we reject the view that all citizens mold policy with equal force, then we must acknowledge the inequities of the policy-making process. Policy would seem to be legitimized not in the popular will but in the exercise of power. To sharpen the issue we may define clients as representative of the unpriviledged, power-deprived societal groups. Policy makers, we may argue, are spokesmen and helpers for the power-saturated and overprivileged. Hence an adversarial arrangement exists, with practitioners signing on as advocates and rejecting policy as another manifestation of an ongoing conflict of interests. Cloward and Piven took such an approach when they wrote of the 1960s:

> The issue was whether we were going to take sides with the agencies and further our careers, or with the victims of an aggressively cruel capitalist society. Were we in our daily work going to defend the practices and policies of the hospitals, courts, prisons, foster care agencies, welfare departments, and mental institutions for which we worked, or were we going to use our jobs to defend and protect the poor, the sick, the criminal, and the deviant against these agencies? That is the real and difficult challenge.[6]

Cloward and Piven assume that the interests of the professional are identical with those of either the power structure or those of the client group, and while it is certainly the case that some social workers see the choice in these terms, this formulation fails to account for the role of broker among interest groups. Whether or not practitioners can promote universal goals, they surely serve purposes that transcend allegiance to one or another side in a dichotomous confrontation. While all conflict theories reject the idea of underlying solidarity within societies and see social progress as being realizable only through conflict, and while a basic postulate of these theories is that conflicts do not exist within our dichotomous groups of reference, we contend that reality is more complex than that. In fact, clients and sponsors themselves have heterogeneous perspectives.

The relationship between practitioners and clients is fundamentally ambiguous. Practitioners cannot seek a relationship of unqualified solidarity; they must operate within the rule in order to channel advantages to their clients. By the same token, they cannot participate in an adversary relationship against the client in the name of the system. Both pulls are there. They must be adjusted. If a solidarity position is taken, then the practitioner is prevented from using the system on behalf of the client. If, on the other hand, practitioners align with the system against the client, then there can be no confidence and trust, and these are essential preconditions for a helping relationship. Consequently, practitioners must take both positions at different times, and this makes their mission ambiguous and uncertain.

Power

When Bacon equated knowledge and power, he presumed it made no difference what one's goals were. He had noncontroversial goals in mind, for example, "health," a value preserved or recovered through medical "knowledge." The power that Bacon equated with knowledge was power over nature. In the present context, however, we are concerned with power as a social phenomenon--not mankind's power over nature, but one human individual's or group's power (supremacy, control) over another. Power in this sense represents a crucial aspect of the interaction between collectivities (ethnic groups, classes, etc.) that have conflicting desires, goals, and needs. When desirability is in itself controversial (because of the differences in goal orientations of individuals and enduring groups), then effectiveness through the use of knowledge has to be scrutinized in terms of whose purposes are being promoted.

What practitioners hope to achieve through their action may or may not be congruent with what is good for society or what is good for particular factional or group interests. While all human beings can be seen as equivalent in terms of their desires and needs for economic well-being and for self-respect, it is an extraordinary misunderstanding to conclude that all individuals are thus in solidaristic relationship to each other. The similarity

or identity of desires is not the same as social solidarity, especially in situations where the realization of these desires requires access to resources that are in short supply. General scarcity can produce fierce competition. Moreover, the stronger the desire, the greater will be the competition. Power, then, is central to our understanding of the goal-directed action that is practice.

It is useful at this point to distinguish authority from power. Authority is the generally accepted right to demand compliance or credence. Power, by contrast, is control not based on such qualifications. It is based on the possession of coercive potential. Practice involves a combination of authority and coercion, that is, it has both authority and power dimensions.

Authority exists when I must do what someone says because I acknowledge that he is in a position of legitimate control. I agree to submit, because he has a socially conferred right to demand compliance. There are two types of authority: prescriptive authority that derives from a person's position in an institutionally defined hierarchy; and informational authority, when someone's information is judged to be reliable and useful and to be relevant to the present situation. Authority generally has an underpinning of power. However, the rightfulness of authority's claim allows the coercive component to remain inoperative. Indeed there is the expectation that compliance will be voluntary or else something is wrong with the authority. The legitimacy of the authority may be impaired if the compliance is not voluntary over periods of time.

Skill and Craft

Professional schools and schools of public policy attempt to teach skills. "Conventional thought has practitioners inhabiting a world of action; they are doers, people who apply skills and knowledge to the solution of practical problems.[7] The central importance of skill is assumed, and this always involves some technological dimension. Practice therefore can be changed significantly when its technological component is altered. Scientific, probabilistic knowledge is accumulated and then cast in the form of technology--the practical application of scientific understanding. The use of computers in teaching and the use of drugs in therapy are examples of the influence of technology on skill. A considerable amount of research and development is directed at discovering new technology to alter the skill component of effective practice. Central to this conception of practice is an emphasis on "know-how," that is, the combination of skill and a plan of action.

We have included both skill and craft among the elements of practice. Certain categories of practitioners master complex and exacting skills in order to function effectively. Skill requirements vary considerably from one category of practitioner to another. For some, the efficient discharge of tasks does not depend on formal training in some highly differentiated skill that is transfer-

able from one institutional setting to another. These practitioners may, for example, need only skills of low complexity or, possibly, skills that can be acquired only through an informal process. Because skill is part of practice on many levels and in many forms, the study of skill as an element of practice calls for careful differentiation. There are, for example, general skills of language and of argument-building and story-telling. These linguistic and conceptual skills are certainly crucial preconditions for effective practice, but they comprise only a small part and that which is most readily isolated from the institutional context in which practice takes place.

Power in a social context is not identical with know-how or skill, but it is sometimes acquired through the exercise of skill. As in Bacon's famous equation, skill may afford the practitioner a certain effectiveness--that is, the ability to translate desires (values, goals, purposes) into satisfaction, the realization of purposes. In questions about practice, the adjective "effective" is an indispensable qualification. But it is surrounded by many difficulties. For example, what is essential to effective practice may not be teachable. Skill seems not to be enough; rather, effectiveness requires a sensitivity to power issues, which, while capable of being learned, is not necessarily capable of being taught.

For purposes of this discussion we would like to distinguish betwen technological skills that permit the practitioner to achieve small-scale goals, and the broader concept of social effectiveness that is mediated by power. We consider "craft" to be the skill an individual exercises within a power dynamic to achieve professional and social purposes. While skill and craft are related, they are not equivalent. "Craft," having a dictionary definition of both "an art, trade, or occupation requiring special skill" and "skill, ingenuity, dexterity," connotes both skill and a sensitivity to the exigencies of the setting. The power or powerlessness of practitioners and their clients organizes the practice setting; hence effective practice emerges as skill exercised in full recognition of, sensitivity to, and effectiveness with power.

While the research and development projects discussed above produce the "how-to" information that constitutes skill-building, and these skills may be isolated, objectified, investigated, measured, tested, generalized, and improved, craft is not so easily impacted. It cannot be isolated from the setting in which it is being exercised, so knowledge about how to exercise it is neither widely produced nor readily integrated by other craftsmen. It may be argued that craft is simply a variation on skill--that a practitioner's skills may be more or less complex, but that skill development is the central ingredient. We respond that craft is greater than skill; skill is basic, but it is craft that captures the practitioner's understanding of purpose and setting and draws on the various types of knowledge that inform everyday practice.

Of what does this knowledge consist? The applied science model posits research knowledge that is objective and predictable. Ours

is a broader conception of knowledge for practice. It seems to us that the knowledge which informs practice is not a body of fact which may be increased or amended through input from scientific research. Scientific facts play a role, of course. For example, gerontological practitioners, informed by physiological research that old-age deafness is of the higher registers, cease to shout at their elderly clients and instead soften so as to lower their voices. On a broader scale, facts about the effects of moving on the deterioration of old people have recast many practitioners' and service systems' relocation schemes. Yet information is meaningless if it is not organized and prioritized, and practitioner-craftsmen organize their informational universe through guiding principles we call myths.

Action-Organizing Myths as Guiding Principles

In order to be effective, action must be informed by a view of reality. This view in turn derives from a set of pinciples that organize the relationship between the practitioner and the client, the policy maker and the practitioner, the practitioner and the larger society. Each guiding principle has merits and drawbacks. Surely there is no way of organizing reality that is problem-free. What is important about these views of reality is that they are based on a presumption about the way an individual interacts with the universe, and this presumption cannot itself be proven; rather it is the condition necessary for inquiry, thought, and action to proceed. Since these organizing or guiding principles are based on a prior faith not subject to falsification, they may be regarded as myths. But they are myths that cannot be dispensed with, because they provide a framework for organizing an otherwise chaotic reality.

Three myths or guiding principles are reviewed. Each provides the practitioner with ways of perceiving and manipulating the world.

The Probabilistic Myth

The first principle involves assumptions about probability and may be referred to as the myth of the mode. Here practitioners understand their situation by judging what can be expected with greatest probability given certain conditions. This is the probabilistic, regulatory epistemology that underlies much of scientific thought.

According to this approach, the practitioner's decisions are based on empirically gathered knowledge of what is most likely to occur. The law-like regularities sought are not deduced from first principles, but are reached inductively, by observation. Although policy is more modally oriented than practice, still the practitioner acts by searching out the components of a probabilistic relationship and proceeding along the lines it sets out. Here the practitioner's action is guided by a view of the generalized human being, projecting from a few particulars to the general case. These aggregated

estimates are based at times on private and casual encounters, and at other times on statistical procedures derived from sampling theory.

Lipsky offers and example of the probabilistic principle at work when he discusses "slotting." Here the "street-level bureaucrat" assigns each client to a category to which from prior experience a set of expected behaviors has also been assigned.[8] The behavior of the client is anticipated by the category to which he or she is assigned. The practitioner has an established repertoire of responses from which are elicited those appropriate to the client's slot. The granting of parole is an example of the probabilistic principle in operation, because selecting individuals for parole is based on a judgment about the probability that individuals with certain characteristics will become recidivistic.

Sometimes the probabilistic principle is inappropriate. In the human services, the slotting of individuals in order to screen complexity with simplification creates rather than simply anticipates behavior. Self-fulfilling prophecies are the product of labelling and stigmatizing. Probability is never totally accurate, either. Indeed it is not meant to judge individual futures, but to weigh possible outcomes of combinations of socioeconomic variables. When an individual is assigned to a category in which he or she enjoys only an imperfect fit, there is the risk of great damage by inappropriate treatment.

The Universal Myth

The second guiding principle is the principle of universal norms. Here the practitioner identifies universally applicable criteria of good or bad, and judges individuals by universal postulates. In social work practice, clients are generally to be treated according to such universal norms as honesty, dignity, respect, openness, and fairness. However, the universalist myth threatens to become self-defeating and to lapse into an approach that is not humane. Perhaps the most famous example concerns the even-handed application of principles of universal justice, when the unrelenting pursuit of justice may itself be unjust unless it is tempered with mercy and compassion. However, when mercy tempers justice, even-handness must be forsaken, since a strong element of discretion enters, which creates unequal treatment of individuals in similar circumstances.

The merit of a universalist approach is that it provides stable and firm criteria to guide action. The drawback arises because wisdom is limited, and it is difficult to grasp fully how to apply the universal insight in a particular situation.

Consider, for example, the principle of humanitarianism. Social workers hope to guide their practice with this universal principle of humanitarian ideals. But what does humanitarianism mean in a particular case? The treatment of handicapped children in the Vietnam

War provides an example. From one perspective, the humane way to treat war victim children would be to bring them to the United States and provide the best medical help available. Humanitarianism then would be defined in terms of a curative but depersonalized technology. From another perspective, the humane course of action would be to leave the children in their familiar surroundings in order not to disrupt their sense of continuity, familiarity, and identity on which their well-being depended. According to this view, it would be inhumane to dislodge children from their natural setting, where they are attached to community and kin, and bring them to an alien land for treatment. Is the inhumanity of dislocating a child justified if it is to save the child's limb or perhaps his or her life? Different voluntary bodies, such as the Red Cross and the United Nations, took quite different positions about what the humane thing to do was under these circumstances. Thus clashing interpretations of humanitarianism could not be isolated easily from the institutional interests of the participants in the child-saving mission.

The Individualistic Myth

An individualistic approach seeks to treat each client as an individual of special and unique qualities. According to this perspective, it is wrong to press the individual into probabilistic or universalistic molds, because we then neglect whatever of his or her nature falls outside the categories, and because the very categories we use may create the condition we are trying to avoid.

The great merit of individualism is that the concrete living person is never lost from sight. Thus the individual is not subordinated to some probabilistic category or to some universal norm. In order to be guided productively by the myth of individualism, the practitioner must try to avoid sentimentality and overidentification. This in turn requires confidence that the client will not break off the relationship when he or she is refused something. The practitioner must exercise considerable professional discipline, that is, control of his or her motivations, in order to properly handle relevant information and exclude that which is personal and irrelevant for the institutionally defined role.

In summary, practice is concerned with effective action in realizing institutionally defined values. Practice is always a matter of action- of making things come about. Effective practice is anchored in skill and craft, hence the Baconian equation of knowledge and power. But skill that is naive about power has limited effectiveness in human situations. From the perspective of human practice, power almost always emerges as a problem in its own right, primarily because groups have conflicting goals and differential capacities to realize them. Craft, then, becomes skill that is power-savvy. At this point myth enters professional practice and organizes the practitioner's power dynamic and larger world view.

Edelman pointed out that it is both "misleading and irrelevant

to label this process of creating perceptions and meanings as 'irrational.' It is more to the point to say that it is inevitable, that it has systematic effects upon political attitudes and behavior, and that a beginning can be made towards specifying those effects."[9] All forms of action presuppose a set of guiding principles that help frame reality and give it meaning. Probabilistic, universalistic, and individualistic myths provide guiding principles for practice--for knowing and for acting. Each myth has its merits and its drawbacks, but one ought not to assume that one myth will serve in all situations. In a practice situation, what is essential is not only probability among variables, but faith in institutional purposes. Because in secular societies religious faith does not guide action, some substitute faith or theory is required here.

For example, a theory of mental health may serve as a secularized faith; it employs, but is not equivalent to, probabilistic knowledge. It also consists of norms concerning healthy (desirable) and unhealthy (undesirable) orientations to reality and prescribes action that may relieve the suffering of the mental patient. Even if some consensual, convergent, scientifically verified theory of mental health arises in the future, the present demands a belief system. We cannot organize our action without such a system; hence some measure of faith enters as a fundamental element of practice.

Malinowski suggested that all societies require a combination of science, magic, and myth.[10] We call upon science to provide us with instrumental knowledge, to tell us what buttons to push in order to achieve desired action. Here we are guided by the positivist assumption that it is possible to identify law-like regularities in nature that can be put to work usefully. We call upon magic when we are in situations in which we have to act but are uncertain what do do because we have no science to guide us. Practitioners simply cannot say that they are uncertain; they have responsibility for acting on the problems that fall within their practice. Finally, we call upon religion and myth to give us a vision of the ends of the system within which we act. Mankind needs teleology, that is, purposes to which he can strive, and commitment to purposes requires faith. Myth and religion provide us with a dogma that anchors our activities in values. Professional practice and human activity (praxis) require in varying measures a combination of magic, science, religion, and myth.

Knowledge for Practice

What kind of science can we use to develop a productive, instructive theory of professional practice--one that accounts for skill combined with power, myth, and ambivalent purposes? We take the view that formal, empiricist, positivist sociology provides only a partial answer, because questions of professional practice are deeply normative. Since it is customary to turn to social science for advice about social action, it is not surprising to find

even the question stated in positivist terms: What is the contribution of empirical research to problems of practice? This statement of the problem reveals the bias we wish to protect ourselves against. We therefore will redefine the question as the relationship between knowledge and practice. This broader focus seems especially appropriate as we examine practice problems in social work. We are in search of some intellectually fruitful approach to teaching and studying practice and to increasing its effectiveness.

Before proceeding, it is important to clarify that our search for a broader perspective does not imply that we reject altogether the applied science model, that is, the contribution of empiricist, logical-positivist, qualification-oriented social science and its efforts to develop law-like regularities in human behavior. We believe that we can learn something from this approach, but not enough. Why not turn to the more intellectually diverse field of philosophy for guidance? We proceed with caution because many who have traveled this route have concluded that "philosophy too has rather left us in the lurch...the results are often spurious profundity and the jargon that surrounds them is corruptive. It has left reality, the obstinate, messy, sovereignity of the everyday world."[11]

While we do not regard philosophical alternatives as fully developed, they are potentially valuable in their systematic treatment of praxis. More importantly, they view practice as a component of the human situation as being-in-the-world and not merely as an abstraction. When we return to any school of philosophy, we recognize that it can provide only partial answers, and that every philosophical approach is problematic at some level. Nevertheless, philosophy is useful to the extent that it liberates our thinking from the narrowness of our initial position, opens a new line of inquiry to pursue, and grounds us in the world of experience.

We would like specifically to examine the ideas of the German philosopher, Jurgen Habermas. He is explicitly concerned with problems of praxis and practice and attempts to locate these problems in the most basic situations of human existence.[12]

We are particularly interested in Habermas' delineation of three types of knowledge. First, there is empirical-experimental knowledge, which is oriented toward control of nature, including human nature and human societies. This knowledge is reasoned and instrumental understanding that points up the kinds of action we need to take in order to exercise control over our environment. By positing experimentation's interest in control, Habermas does not mean that this is a scientist's conscious purpose. Clearly, many scientists pursue knowledge for its own sake. Rather, the philosopher's claim is based on the view that a systematic relationship exists between the logical structure of science and its application. The procedures and methodology of science rely upon "feedback from prediction and test...explanation and prediction are viewed

as strictly symmetrical" and the only function of theory is to provide a basis for prediction.[13]

A second kind of knowledge is directed at clarifying acts of communication. The interest here is in establishing and maintaining communication among groups--something that is essential for collective and social activity. This hermeneutic[14] knowledge enables us to decode encoded language. The creation of human social groups depends on the existence of shared codes.

In addition, Habermas posits a third type of knowledge, which like the other two has its own interest, namely the interest of reason, which finds expression in self-emancipation. This third type of knowledge seeks self-awareness. Psychoanalysis is the model for emancipatory social science, for through a process of self-reflection, the analysand discovers the previously unintelligible meaning of his or her own actions. Dreamers and their dreams provide a prototype: They create their own dream, even if they cannot comprehend its meaning. In a similar way the social scientist can help people understand their situation in the social world. Emancipated persons consciously comprehend themselves as the product of the history that has formed them.[15] For society, self-awareness involves knowledge of its own history by self-education, and for the individual it involves self-reflection as a way of gaining knowledge of one's own life history. Philosophically, self-reflection is knowledge of the conditions that make possible one's own knowledge. When self-awareness is deflected or thwarted, then one cannot intellectually realize one's technical and practical interests.

The reflective approach hinges on casting a critical eye toward what exists in oneself and in society. One's mission in life becomes to adopt a critical position vis-a-vis whatever exists. Autonomy and nonconformity are essential to such criticism, because the latter is possible only when we are able to establish an independent point of view. However, autonomy as a goal and as a precondition for critical thought is itself somewhat problematic when applied to collective and societal goals. We always run the risk of believing our thought patterns to be autonomous, when in fact they are the product of unrecognized forces. This is especially true because reflections mus themselves be tied, at least partially, to some prior held interpretation of how society functions.

While the three types of knowledge and the interest that constitute them are closely related, each captures a unique aspect of human understanding. Habermas appears to be more interested than we are in choosing one of these approaches as his own, and he reviews the history of philosophical thought to establish a basis for his position. He argued in this regard that Marx considered world history to be "the production of mankind through human work." Production is here the only worthwhile datum for understanding society and controlling it. Habermas takes exception to Marx' view, arguing that knowledge also is essential. Societies are nourished by communication as well as by production. However, hermeneutics has a basic weakness too. It has its no laws and no explanatory power,

if we accept the distinction between explanation and understanding. Neither hermeneutic sciences nor empirical sciences can provide critical-social theory grounded in autonomous self-reflection. Habermas therefore offers psychoanalytic theory, modified to serve his purposes, as an illustration of this kind of social criticism.

We have identified three approaches to the study of practice that broadly and loosely correspond to the types of knowledge delineated by Habermas. We have been stimulated by Habermas' approach but not fettered to it. We are in search of a broad interpretation of how social science can contribute to better practice--an understanding of the relationship of knowledge and practice.

Study Practice As a Science of Mutual and Reciprocal Relationships among Human Beings and Not As a Science of Control

When a practitioner's epistemological orientation is instrumental, he or she runs the risk of seeing all human problems as problems of control. Evaluation of a social program often sees it as something that is done to or for clients, as an effort to alter their behavior. The change in client behavior is therefore conceived of as output. That client reaction to the practitioner's efforts might itself be considered an input in a mutual and reciprocal process of change is a sharply different view of the nature of social programs. The argument against pursuing control in human situations is epistemological, ethical, and practical.

The epistemological argument is perhaps central and is certainly the most intriguing, especially as theories of knowledge and political theories are closely linked. For the positivists, knowledge-gathering is a process of educating societies against irrational beliefs and ideologies. These might otherwise capture collective efforts and become policy-making ideas in good currency. Ideologies may be tested by scientific methods, that is, through the Popperian principle of falsifiability, where the planks of a belief system may be empirically disproved. Naturally, reliance upon this controlled, critical testing presupposes an open society, "where incompatible views can be expressed; where everyone is free to propose solutions and to criticize the proposed solutions of others; and where government policies are changed in the light of criticism."[16] This is a radical vision of government run by reason, not by violence or political accommodation, and the applied science model is its secular god.

Habermas argued against this Popperian image, because natural and social phenomena differ fundamentally as objects of knowledge. Human beings must be understood in a framework of intentional behavior where purposes are central. Here social scientists must gather information not to refute but to understand meaning. "In place of controlled observation, which guarantees the anonymity of the observing subject and thus the reproducibility of the observation, there is a participation in a dialogue between investigator and investigated, in which reciprocal interaction occurs."[17]

According to the ethical argument, control should not be taken as the sole or principal mode by which professional practice is conducted or understood. We do not argue against all forms of control; some measure of control is clearly necessary if society is to function. However, reliance on control and power in human relationships may take unacceptable forms. What is acceptable control in one period becomes unacceptable in another, as the standards for judging acceptability change. It is, for most purposes of practice, ethically illegitimate to treat others as objects of control exclusively; people should be viewed as active subjects in shaping and defining their own lives.[18]

The pragmatic argument against control asserts that those who exercise it will themselves be controlled by the conditions they impose, since social processes are interactive and reciprocal. Hegel expressed this reciprocity of human interaction in his example of the master and the slave. The master is bound by the necessity for control over the slave, and in time the master becomes dependent upon the slave for his well-being. The examples can be generalized in the following form: If A controls B, then B controls A, although perhaps not to the same extent. A student or client is not simply molded by a teacher or social worker. Rather, the former play an active role in what occurs, and to some degree shape what the teacher and social worker do. Even in unequal social relationships, there is an element of reciprocity--of autonomy and the exercise of control on the part of the weaker. Furthermore, if a really enduring relationship among human beings is to be established, it must be on the basis of mutuality and not controlled participation. This becomes apparent in the distinction between one-time encounters and long-term relationships. Control may be operative for a while, but it necessarily breaks down over time.

We reject an orientation toward control because we find it lacking on epistemological and ethical grounds and because we believe that it simply will not work. We are led, then, to seek a humanistic social science, that is, a science of reciprocal relationships among human beings and not merely a science of control. A humanistic social science, so defined, takes several forms. For example, an expose that reveals how presumably benign practice, that is, helping people help themselves, can be reinterpreted as a practice of unilateral control. Lucas' analysis, "The Political Theory Implicit in Casework Theory," showed that social workers hold low-income families to a higher moral standard than that which prevails in society at-large. This raises the disturbing question of whose interests are served by this establishment of unequal standards and why the agents who serve these interests do not understand their role. Similarily, Tyack's historical study of urban schools uncovered how elites and academics collaborated in creating a unified body of educational practice and standards in America at the turn of the century.[19] Whatever genuine problems this reform addressed, it also was clearly a determined

effort by the WASP elite to establish political control of the schools, where governance by ethnic groups was increasingly prevalent. Many other studies of administrators, psychologists, psychiatrists, and medical doctors have shown the ways in which professions come in time to serve as instruments of control.[20]

It is not only helping professionals who come to exercise control; so too do social scientists in their effort to be rigorous, disinterested, and "scientific." Argyris joined the Habermasian, anti-positivist critique with the following argument. The rules of scientific method require controls. These are most prominent in situations of social experimentation, where the scientist sets out to create a controlled environment and so to reduce error by warding off the demons that threaten internal and external validity. Here subjects are told what to do. Their time perspective is restricted, and their behavior is recorded along operationally specified dimensions that provide objective measures and permit replicability. In addition, scientists distance themselves from the experiment in order not to contaminate the results. But these very efforts to increase validity undermine it, because the experimental situation creates a dependency relationship, a short-time perspective, and a reduction in the subject's freedom of choice, all of which produce a highly restricted view of the world for the subject. Such an experimental environment threatens internal validity because of its artificiality and erodes generalizability by producing data that are valid only for people reacting in this artificial situation.[21]

We should like to temper our discussion of control by admitting it to be both overstated and misstated. It is overstated because the use of positive knowledge for social control is more complicated than what we have sketched. First of all, some measure of control is essential if a society is to survive; all social control is not anathema. Conceding this point, we must specify the conditions under which knowledge for social control is desirable and those under which it is not.

Our argument also is misstated because the exercise of control is indirect rather than direct when we adopt rationality as the basis for human action. Since the Enlightenment, political actors have been hard-pressed to justify their actions with reference to divine guidance. While political expediency still precludes assertion of naked ambition, today justification takes the form of "reason," and the modern secular priesthood is composed of social scientists. It seems then that control by social science is a function of where it is situated, how its findings are communicated, and how the information/knowledge is used in the political process. The social processes by which knowledge is generated and used is intimately mingled with the terms on which normative policy issues are debated. Social sciences provide the vocabulary and the terms of reference for the debate.

Study Practice In-Situ

The dominant view of the development of knowledge for practice holds that this kind of social science be generated in the university, tested in the laboratory, and then handed down to the practitioner.[22] Knowledge so produced is thought to upgrade professional practice, and its usefulness in making practice more effective is not questioned. Instead, a major obstacle is identified in the resistance of the practitioner to science. The task then becomes to expose these men of action to the regularities and laws that have been discovered in the laboratory. Such is the applied science model of the dissemination of knowledge to practitioners. We advance several objections to this view of discovery and communication.

First, the applied science model seems to rest on an unconscious elitist assumption that change proceeds from top to bottom. In fact, as researchers such as Donnison have discovered, many changes in policy occur not as a result of changes in theory, but in response to changes in practice.[23] The theory that is developed serves to justify the change which has already taken place in practice, rather than the other way around. Park made this point many years ago when he wrote:

> As a matter of fact and of natural history, the problems which attract public attention are usually problems of administration. When emergencies arise, we meet them with some novel administrative measures. Later on we formulate a policy to justify the innovations; we do this by interpreting our legislative and administrative experiments...On the whole, theory follows practice and serves to generalize, justify, and rationalize it.[24]

We would assert that more happens in practice than can be accounted for in theory. Interestingly, a similar argument is made in the field of scientific technology. It is now conventional wisdom that not only does technology progress by means of new science, but the latter is generated in attempts to explain novel technological phenomena.

A second objection to the dominant view above is philosophical rather than practical. The flow of communication described in the applied science model bespeaks an epistomological demand that the knowing person be separate from the acting person. We find this a dubious standard for knowledge-gathering, for it is more often when the researcher works side by side with the practitioner that he or she can share the practitioner's tacit knowledge. Sharing the experience of everyday practice, the researcher can come, in time, to respond to the practitioner's world--to formulate research questions and analyze research data from his or her own intuitive grasp of the practice situation. Nevertheless, this form of co-operative activity is not without risks; social scientists are finding "that greater and greater exposure to the natural context out of which their research arises leads them toward serious reflection on the efficacy and limitation of their role as scientists."[25]

Yet another difficulty with the model is that the findings of the social sciences are not sufficiently homogenous to be of use to most practitioners. It is hardly worthwhile for harried practitioners to read the best journals only to discover professional confusion and controversy. Suggested by this assessment of social science knowledge is that university and laboratory settings may not best provide for learning.

Earlier we argued that practice is more than instrumental skill to realize one's own purposes, but is a function of an institutional setting where questions of power, ambiguous purposes, and myth necessarily enter. We should like to extend that argument to include the notion of several kinds of practice information. We are able to identify at least three kinds. First, there are practical data about the institution, about norming-myths, and about how one accomplishes tasks and avoids tasks as well. Secondly, there is diagnostic information about setting the problem. This consists of understanding which situations are problematic, and the shared interpretation of where the difficulty lies. Third, there is judgement about what is worth doing, even given an element of doubt. Here practitioners require a neglecting rule as well as an attending rule and find this type of knowledge is particularly germane to the allocation of scarce resources.

These three types of practice knowledge do in fact interrelate. We propose that the best understanding of practice is a dense, descriptive one--one that accounts for the ways in which levels of knowledge come into play. Of course, ours is not the only way to respond to the complexity of practice. One might choose to take the opposite approach, summing up the complexity and simplifying it through a more abstract model. It is model-building that is likely to require a university. While it is not a simple choice, we support more opportunities for the study of practice in situ. Such knowledge is apt to be more responsive to the problems and puzzles that practitioners face. As White remarked, a new approach is needed that "challenges the theory of human communication... between theory and practice. Instead of working through 'channels'--sitting within the ivory tower and passing papers out to those who live in applied settings--researchers have taken to walking out of the ivory tower, entering as participants in the applied setting."[26]

A final rationale for the scholarly study of practice in situ draws on our analogy of the research scholar as a member of a priesthood. When the priesthood becomes recondite and removed from the problems of its flock, the sheep tend to drift away; they no longer hear a message of any use to them. In reaction, priests are sometimes dispatched to go mix with the people and bring the word of truth to them in their native land, where the clergy become involved in their parishioners' everyday problems. Of course, when this strategy is carried too far in social science research, the scientist runs the risk of losing perspective on his or her subject matter. The very integration of knowledge-gathering and practice struggles can create a crisis of legitimacy for the scholars. They are no longer above the fray and have a stake in its outcome.

Consciousness--The Study of Practice Through Self-Awareness and Self-Reflection

Habermas, like many other philosophers, argued that there is no immediate grasp of objective reality. There is always some conceptual, cognitive grid that expresses the human subject's original being-in-the-world. There is no such thing as a scientific construction of reality in atomistic terms. One starts with being in a comprehensive system. One is always in the world, in a context; one is not merely a passive recipient of sense impressions.[27]

We can restate this position as follows: Because reality is infinitely complex, one must frame understanding of a bounded world and create categories for explanation, for interpretation, and for guides to action. Frames provide us with rules of simplification and impose order, meaning, and direction on reality. Thus believing is seeing, and interpretation at sharp variance with positivism's view that seeing is believing. Formating is the aspect of framing that produces cognitive structure in the form of myths, maps, and metaphors. The problem of self-awareness in professional practice arises with the recognition that practitioners do not share the same myths, are not "reading" the same maps, and are not guided by the same metaphors. Before discussing the role of self-awareness and self-reflection in knowledge-gathering, we need briefly to discuss our meaning of each of these terms in the context of practice.

A myth is a story with a moral. It is a story that makes the world meaningful and points up the actions that are required of the good practitioner. Myths provide shared symbols, and these make identification with a community of practitioners possible. Indeed, one of the uses to which the social sciences may be put is myth-making for practitioners--myths that both construe an inchoate field of events, pleasures, and pains, and suggest appropriate action.[28] The fractionated nature of practice and the pluralistic nature of policy create the need for many myths, one of which must be all-embracing and integrate or at least contain many parochial myths.

A map, by contrast, is a way of linking together events on a set of analytical dimensions. A good map not only locates events in relation to one another and to the actor, but helps him or her identify the route he or she would like to take.

A metaphor, following the writing of Ricoeur, may be understood as a work in miniature. A work refers to a text, a dialogue, a program, or a practice that needs to be explained. Metaphor captures the sense of the text or the dialogue and summarizes one's understanding of the work as a whole in a single statement or word. It converts a work into a word. But how does one grasp the metaphor that underlies our practice? The emergent meaning that is summarized by the metaphor is a construction on the part of the reader. "The mataphorical twist is both an event and a meaning" which the reader interprets in the event. This reciprocity is known as the "hermeneutical circle," and it is a highly controversial view of how meaning

is assigned to a text. As Ricoeur pointed out, "logical empiricists could only reject as sheer scandal the mere idea of a hermeneutical circle and consider it an outrageous violation of all of the cannons of verifiability."[29]

When myths and metaphors are overlayed on maps we speak of "frames." Again, frames provide understanding, a view of what is meaningful in reality, and of what action we as individual practitioners must therefore take. Framing is necessary for what Marris called "meaning and action."[30] There are many perspectives on reality; one need not be the prisoner of a single construction. Moreover, no frame captures the essence of reality independent of the way in which individuals interpret it. The hermeneutic circle arises from this dialectic "between disclosing the world and understanding one's self in front of this world."[31] In this sense, the act of interpretation enlarges self-understanding but cannot be altogether separate from it.

We use the term "frame" as a neutral description of concepts that organize reality and guide action, that unify meaning and action. When frames become politicized we speak of ideology, and when they become sufficiently coherent to guide the theorizing and fact-gathering of empirical research, we speak of paradigms. The importance of frames has surfaced, too, in the arts. The film Rashamon, Pirandello's play, Right You Are if You Think You Are, and Durell's work, The Alexandria Quartet, all dramatically portray the way in which one constructs reality. Our essay then argues that what is a far-flung cognitive process also constructs the reality of professional practice.

In brief, practitioners need a conceptual grid of shared symbols--of shared myths, maps, and metaphors--to guide professional practice. Without these, their practice has no meaning because their actions have no referents. Yet faith alone is insufficient. Practitioners must adopt as well a critical, autonomous stance from which to reflect on their faith. Habermas argued that the essence of social reality is the self-expression of the human individual and in particular his or her ability to achieve an independent position toward institutionally established rules.[32] Autonomous individuals must challenge the inequities in institutional regulations, and practitioners must develop a critical eye toward an established practice and alternatives for action. What is fundamental for a critical practice is the ability to doubt one's frames as well as to believe in them.

What we have described is a tension between two imperatives. On the one hand there is an urgent need to impart meaning to the world. "We believe in order to understand, and understand in order to believe," the latter an example of post-critical faith. Here the faith has undergone criticism, and the criticism has preserved meaning. On the other hand, there is an imperative to doubt, to suspect, to demystify, and thus to temper the illusion on which action is founded. Marx, Freud, and Nietzsche were masters of this school of suspicion, sharing an opposition to the sacred.

To this we add the paradoxical point that both Marx and Freud created a sacred commitment to their views.[33]

As practitioners seek ideology to make their actions meaningful, they also continue to learn from experience, and, as Park observed, theory follows practice.[34] Thus the experience derived from actions demystifies the ideology of practice, forcing practitioners to reconstitute it so that it fits their new experience. In other words, they oscillate. Action shatters faith, but without faith action is impossible. One must recreate the meaning that was lost in experience. Ricoeur's presentation of the rules of interpretation may be applied to practice, as a mandate to seek out both the restoration of meaning and the reduction of illusion.[35] It is not a question of choosing one or the other; both are needed, especially as they constitute the capacity to learn.

Criticism requires that practitioners become aware of the frame that organizes their reality. This is no easy feat, since they must first recognize that there exists a multiplicity of frames, and distance themselves from their own. We believe that the call for research on professional practice should be directed more often at getting practitioners to be critical of their frames. Perhaps what makes the exercise most difficult is that criticism can undermine meaning and thus rob the practitioner of the faith necessary for action. We believe that all ideologies of practice suffer from two difficulties. We start with faith, which is translated into an ideology of practice. However, when we uncompromisingly subject ideology to critical scrutiny, it is found to rest on empirically uncertain foundations or to suffer inherent ambiguities and inconsistencies, which prevent a full testing of its assumptions. Moreover, there is substantial indeterminacy about how to apply ideology to everyday practice situations. Ideology does not provide us with unambiguous rules for action in the concrete situation. Several conflicting interpretations seem equally plausible. When the ideology provides no obvious bridge to action, we face indeterminacy. Instead of a unity of theory and action, there is only awkward discontinuity, inconsistency, and unclarity. Practitioners may succumb to doubt, but doubt leads back to faith. When practitioners cast a critical eye on practice and try to distance themselves from the actions they take, they recognize that action is necessarily wedded to purpose. Without a teleology, action becomes a meaningless ritual, and the practitioner-critic returns to the search for an ideology of practice. Thus the professional continually feels the need for both faith and doubt.

If we start with ideology and try to find empirical verification, we end with uncertainty and also with understanding that objective tests of the ideology are not typically feasible at crucial points. This is Popper's idea about critical tests that can falsify a theory.[36] The task of inquiry is to guard against irrational beliefs that inform practice. If we use ideology as a guide to practice, we find the ideology indeterminate because the same ideology (humanism) can lead to dramatically opposite positions (for example, a social work article on the Viet Nam War). This leads to doubt.

If we start with practice we discover that practitioners need a belief system to give meaning to their actions. But if they turn to ideology, they face the problems cited above. This leads to the importance of faith.

We are thus torn between what Ricoeur calls the search for the sacred, "the restoration of meaning," which has undergone criticism, and the "tactics of suspicion," which is a struggle against masks in an effort to do away with false idols.37 This tension between the sacred and suspicion we have labeled the conflict between faith and doubt. This tension can produce professional anguish and even paralysis. Practitioners may ease their way out of this duality by developing double-vision--one set of lenses for action and another set for reflection.38

Marris pointed out that during some historical periods the split between meaning and action has been severe, while during other periods faith has been secure and suspicion held in abeyance.39 From the euphoria of the 1960s, we seem to have entered a decade characterized by the anguish of uncertainty. Our lack of faith has been reinfoced by empirical research which shows that social programs by and large do not work. Even more potent has been a political environment of claim overload, where we appear to have more legitimate claims than we can honor without disrupting the economy on whose performance we all depend.40 Political overload and evaluative research reinforce each other. We believe not only that "nothing works," but that we lack the resources to do very much anyway. This empirical-political zeitgeist has potential for divorcing meaning from action.

Research for Self-Awareness

To what kind of research are we directed when we choose consciousness and self-reflection as the preferred kind of knowledge? We would like briefly to review some examples of where the practitioner's reflection surfaces the dilemmas of criticism to which we have just called attention.

We will start with an unusual study of research practice. Bailyn distinguished between research as a cognitive process and research as a validating process. When research is used for validation the data are collected in order to test a preformulated conception. When research is cognitive, "the researcher develops a conceptual grasp as the study progresses and data is integrally involved in the conceptualization process itself."41

Describing her own research on working wives and family relationships, Bailyn conceded a prior held belief that married women should have careers--that frustration of their desire to work is harmful to them and to their families. She was therefore quite alarmed when her research findings showed working wives to be less happy and more dissatisfied than wives who stayed at home. This clash of belief and fact led to a reformulation of the research

problem. By redefining the problem in terms of the husband's attitudes and accommodations to the working wife, Bailyn was able to resume her moral stance. Her study is an unusual probe into the interplay between personal values and data analysis. It is a striking example of the role of self-reflection in practice and reveals the way in which we set about integrating fact and meaning.

Erickson's study of evidence and inference in psychiatric practice provides another example of a practitioner's attempt to reflect on his or her own practice.[42] Here the psychiatrist helped his patient become aware of his frame and the way it distorted his reality. However, the psychiatrist's own frame may inhibit the process of leading the patient to self-awareness. Thus practitioner awareness is a prerequisite for patient awareness. Erickson showed how the psychiatrist's inferences about the patient's problems must be tested by evidence derived from an interaction based on trust and the testing of tentative hypotheses. Erickson reflected on practice so defined.

Yet another example is research that tries to elicit a practitioner's frames to facilitate his or her becoming self-aware. This approach is designed so that in a later stage, frame confrontation may lead to coinquiry by the researcher and the practitioner and to heightened practitioner self-awareness. In this approach, rational reflection on practice is emphasized; practice is asked to take on the norms of science, that is, to value openness, testability, and critical reason. Accordingly, power as a central aspect of practice is subordinated to a commitment to be open to learning. Attention is directed at creating the kinds of settings where reason and direct experience can be brought together to promote personal, professional, and institutional learning.

A major concern is that practitioners become aware of the disparity between what they intend and what they do. Faced with ineffective action, yet committed to effectiveness, practitioners are encouraged to examine critically the multiple dimensions of their tacit knowledge and subject them to critical review. They examine their myth system and the uncertain premises on which action is taken and are urged to exhibit an uncompromising willingness to test these underlying premises. This is learning through reflection on practice, often with the help of an outside consultant whose task it is to confront supportively the disparities between the practitioner's acknowledged theory of action and the form this theory takes in day-to-day practice.

To make their approach clear, Ronco and Schon distinguished:

> "instructive" and "reflective" approaches to intervention. The former take the position that there is something which practitioners (of whatever kind) ought to learn, which they (the intervenors) can teach. This something to be learned may consist of new facts and techniques...it may consist in new ways of approaching interpersonal relationships, or it may consist in broadly conceived approaches to problem-solving.

> Different as these variants may be from one another, they all share a concept of instruction which differentiates them from the approach we call reflective. Here, the focus is on what the practitioner knows (and feels or means) already, that which shapes his present practice. On this view, the intervenor's task is to help the practitioner discover that which already informs his practice but is wholly or partly hidden; then, to help him reflect upon it, restructure it, and act upon his newly restructured knowledge. The intervenor judges his success by how well he has helped the practitioner to build, on his own, the capacity for such a learning cycle.[43]

One source of practitioner frames--indeed, of meaning in action --is theory building. We know that many new theories have developed in the past quarter century and that they have influenced policy substantially. Thus two related questions come to mind: How can we create a system of intellectual supports that nourishes the development of new theories and alternative paradigms for organizing reality? And second, how can we train and support those linking persons who transpose, transform, and translate existing theories into their practice and policy implications? New scientific models created without any practical application in mind may bring about unintended consequences; scientific models developed with a practical application in view may prove "applicable" to different problems.

One way to promote innovations developed in laboratories or other nonpractice settings is to provide practitioners with a retreat, where brief but intense exposure to new ways of viewing the world can be accomplished. What is the likelihood of effecting change with such a plan? Chances are that seasoned practitioners who return to their old settings, even with a new orientation in tow, will revert to their old ways of viewing things or succumb to external pressures to do so. A recent study by the Rand Corporation of innovations in educational policy suggested that successful innovation may require a three-state process. In the first state, practitioners are exposed to a new way of viewing things and are put in situations where they must act in accordance with this new set of principles. During the second stage, they are sheltered from organizational or political fallout while the new principles are being acted on. This support system appears to be crucial, given the tremendous pressures on the practitioner to conform. In the third stage, practitioners simply continue to behave in this innovative way because inertia stymies additional change.[44]

Knowledge and Meaning

In this essay we have examined knowledge for control, for communication, and for self-conscious self-reflection, but we have considered them separately. Our final task must be to relate these ways of knowing to one another, and for this we need a conception broad enough to contain them all, yet sufficiently unique to avoid

redundancy. We also must keep in mind our restricted focus on professional practice.

Hannah Arendt's posthumously published, dense review of the philosophical issues surrounding "thinking" provides a synthetic concept that serves our purposes. She explained that truth and meaning cannot be equated:

> The need of reason is inspired not by the quest for truth but by the quest for meaning. And truth and meaning are not the same. The basic fallacy, taking precedence over all specific metaphysical fallacies, is to interpret meaning on the model of truth...
>
> The questions that are raised by thinking, and that it is in reason's very nature to raise--questions of meaning--are all unanswerable by common sense and the refinement of it we call science.[45]

The constructionist view of social reality that has guided our analysis asserts that there are multiple truths, depending on one's perspective or purpose and the resultant cognitive grid for which we have used the term "frame." Frames are cast in the struggle to assign meaning to events in life. Meaning organizes one's reality and one's practice.

What unifies the three kinds of knowledge and ties them, or any knowledge base, to practice is more the quest for meaning than the pursuit of irrefutable truths, which take the form of "propositions that human beings are not free to reject."[46] The anxious concern about questions of truth and falsehood threatens rather than affirms this search for meaning. Instrumental knowledge directed at the control of nature and human nature, shared expressions of reality that make communication possible, and self-reflection that starts with suspicion and surrenders in the end to some view of the sacred, are of no use to the practitioner except as they are meaningful to him or her. It is meaning that unites and directs knowledge for action. Doubt without meaning leads to paralysis. Yet meaning insulated from the search for truth is dogma. We are not able to resolve this dilemma, only to propose it as a frame for considering knowledge for practice.

NOTES

1. Two disagreements within this social science model are worth noting. The distribution of resources to basic versus applied scientific research is controversial, even among those who believe that societal problem solving may be derived from science. Those who favor an applied emphasis argue that government money should be put into research only if it can produce

solutions to policy problems. Others favor the commitment of greater resources to basic research--that is, to the systematic exploration of relationships among events and actors. They argue that without such knowledge there will be little of value for use in the field of practice. While in the past, funding for policy-oriented research was difficult to obtain, the most recent trends have favored applied research, and there is concern that basic research has become impoverished.

Another divisive issue within the applied science model is the role of hard or soft data in producing positive knowledge. The former is measured and manipulated through quantification; the latter presupposes qualitative judgment. Case studies describing concrete situations in detail necessarily fall back upon a good deal of "soft" data, because the wealth of variables implicated in actual cases defies complete quantification. The proponents of both sorts of data are apt to argue bitterly for their respective preferences, because the hard/soft controversy represents more than methodological disagreement. Not only are basic beliefs about the nature of science called into play, but cleavages reflect different intellectual traditions and academic and professional training experiences. Both sides of the hard/soft split, like both sides of the basic/applied split, view their particular fruits as potentially ripe for utilization in the world of practice.

2. Jack Rothman, Planning and Organizing for Social Change: Action Principles from Social Science Research (New York: Columbia University Press, 1974).

3. See in particular Amitai Etzioni, The Active Society (New York: Free Press, 1968). These comments are based on a discussion with one of the authors.

4. See, for example, Nathan Glazer, "The Teaching of the Minor Professions," Minerva, Vol. 12 (July 1974). In this provocative essay Glazer assigns social work, education, and theology to the minor professions, because they are characterized by instability of purpose and have a low technology for putting their aims into effect. By contrast, Lipsky takes position in a bureaucratic hierarchy as his organizing theme, arguing that practitioners who have direct encounters with consumers share common problems regardless of their level of skill. See Michael Lipsky, "Toward a Theory of the Street-Level Bureaucracy," in Practical Perspectives on Urban Politics, ed. Willis Hawley and Michael Sepski (Englewood Cliffs, N.J.: Prentice Hall, 1976).

5. Lipsky, op. cit.

6. Richard Cloward and Francis Fox Piven, "Notes Toward a Radical Social Work," in Radical Social Work, ed. Roy Bailey and Michael Brake (New York: Pantheon Books, 1975), p. ii.

7. See "Fundamental Research and the Process of Education," a report prepared for the Committee on Fundamental Research Relevant to Education, Assembly of Behavioral and Social Sciences, National Research Council, May 1977, chapter 2, p. 20.

8. Lipsky, op. cit.

9. Murray Edelman, "Myths, Metaphors, and Political Conformity," Psychiatry: Journal for the Study of Interpersonal Processes, Vol. 30 (August 1967), p. 228.

10. Bronislaw Malinowski, Magic, Science and Religion and Other Essays (New York: Doubleday, 1954). We are indebted to Sheldon White for this insight.

11. George Steiner, "The Lollipopping of the West," New York Times, 9 December 1977, p. A 27.

12. We draw especially from Jurgen Habermas, Knowledge and Interests (Boston: Beacon Press, 1971). His style has been described as "a trifle heavy for congenial digestion." It is therefore useful to read as well some excellent reviews of his work. See the Introduction to Paul Connerton's book, Critical Sociology (New York: Penguin Books, 1976); and Sara Ruddick, "Critical Notice," Canadian Journal of Philosophy, Vol. 11 (June 1973).

13. Connerton, op. cit., p. 38.

14. The term "hermeneutic" comes from the Greek word "hermenia," meaning interpretation.

15. Rudick, op. cit., p. 555.

16. Connerton, op. cit., p. 34.

17. Ibid., p. 35.

18. See Vance Packard, The People-Shapers (Boston: Little, Brown and Co., 1977), for a discussion of the various aspects of scientific manipulation of man.

19. Alan Keith-Lucas, Decisions About People in Need (Chapel Hill, N.C.: University of North Carolina Press, 1957); and David Tyack, The One Best System: A History of American Urban Education (Cambridge, Mass.: Harvard University Press, 1975).

20. See for example, Joel Handler's study of the Coercive Social Workers: British Lessons for American Social Services (New York: Academic Press, 1973); and Thomas Szasz' study of the Myth of Mental Illness: Foundations of a Theory of Personal Conduct (New York: Harper and Row, 1974).

21. Chris Argyris, "Some Unintended Consequences of Rigorous Research," Psychological Bulletin, Vol. 70, No. 3 (1968).

22. Sheldon H. White, "Old and New Routes from Theory to Practice," in Theory and Practice of Early Reading, ed. L. B. Resnick and P. A. Weaver (Hillsdale, N. J.: E. R. Baum, in press), p. 10.

23. David Donnison, "The Discovery and Development of Knowledge" (Paper delivered at the 19th International Congress of Schools of Social Work, Jerusalem, August 1978).

24. Robert E. Park, "Sociology and the War," American Journal of Sociology, Vol. 23 (July 1917), p. 65.

25. White, op. cit., p. 21.

26. Ibid., p. 20.

27. Habermas, op. cit.

28. Martin Rein and Sheldon White, "Policy Research: Belief and Doubt," Policy Analysis, Vol. 3 (Spring 1977).

29. Paul Ricoeur, "Metaphor and the Main Problem of Hermeneutics," New Literary History, Vol. 6 (Autumn 1974), pp. 103, 106-107.

30. See Peter Marris' lecture on "Meaning and Action" presented at a seminar in the Sociology Colloquium at Harvard University in December 1977. We are indebted to Marris' insightful analysis of how meaning and action form a political ideology that can guide professional practice. He draws for his examples from the Community Development Programs in Britain, where, over time, the program suffered from a severe split between its interpretation of the meaning of the problem and the action that could be taken from this analysis.

31. Ricoeur, op. cit., p. 108.

32. Habermas, op. cit.

33. Paul Ricoeur, Freud and Philosophy: An Essay on Interpretation (New Haven, Conn.: Yale University Press, 1970), p. 27.

34. Park, op. cit.

35. Ricoeur, "Metaphor," op. cit.

36. Karl Popper, Conjectures and Refutations: The Growth of Scientific Knowledge, 4th ed. (London: Routledge and Kegan Paul, 1972).

37. Ricoeur, Freud and Philosophy, op. cit.

38. We are indebted to Lisa Peattie for this formulation.

39. Marris, op. cit.

40. See Lisa Peattie and Martin Rein, "Claims, Claiming and Claim Structure," mimeographed (Cambridge, Mass.: Massachusetts Institute of Technology Department of Urban Studies, 1978).

41. Lotte Bailyn, "Research as a Cognitive Process: Implications for Data Analysis," Quality and Quantity, Vol. 11 (1977), p. 98.

42. Eric Erickson, Insight and Responsibility (New York: W. W. Norton, 1964). See Chapter 2, "The Nature of Clinical Evidence."

43. William C. Ronco and Donald A. Schon, "Knowledge-in-Practice: An Inquiry into Real World Cognition in Professional Practice," mimeographed (Cambridge, Mass.: Massachusetts Institute of Technology Department of Urban

Studies, 1977), p. 46.

44. Paul Berman, Milbrey McLaughlin, and Joan Pincus, Federal Programs Supporting Educational Change (Los Angeles: Rand Corporation, 1976).

45. Hannah Arendt, "Thinking," The New Yorker, November 21, 1977, p. 74.

46. Ibid., p. 134.

APPENDIXES

APPENDIX I

ROSTER OF CONFERENCE PARTICIPANTS

MORTON ARKAVA
UNIVERSITY OF MONTANA

DAVID AUSTIN
UNIVERSITY OF TEXAS, AUSTIN

MARTIN BLOOM
WASHINGTON UNIVERSITY

SCOTT BRIAR**
UNIVERSITY OF WASHINGTON

JON BUSHNELL
UNIVERSITY OF WISCONSIN-MILWAUKEE

GLORIA T. CHEVERS
CHILD WELFARE LEAGUE OF AMERICA

KAY L. DEA*
UNIVERSITY OF UTAH

IRWIN EPSTEIN
UNIVERSITY OF MICHIGAN

LAURA EPSTEIN
UNIVERSITY OF CHICAGO

JOEL FISCHER
UNIVERSITY OF HAWAII

ANDREW FOX*
SOCIAL SERVICE DELIVERY SYSTEMS
MEMPHIS, TENNESSEE

CAREL GERMAIN
COLUMBIA UNIVERSITY

SHIRLEY JENKINS
COLUMBIA UNIVERSITY

SHANTI KHINDUKA*
WASHINGTON UNIVERSITY

STUART KIRK
UNIVERSITY OF WISCONSIN-MILWAUKEE

RICHARD LODGE
COUNCIL ON SOCIAL WORK EDUCATION

MARY LYSTAD
NATIONAL INSTITUTE OF MENTAL HEALTH

PATRICIA Y. MARTIN*
FLORIDA STATE UNIVERSITY

LAMOYNE M. MATTHEWS
MORGAN STATE UNIVERSITY

DOROTHY MILLER
INSTITUTE FOR SCIENTIFIC ANALYSIS

ANNE L. MINAHAN
UNIVERSITY OF WISCONSIN-MADISON

MIGUEL MONTIEL
ARIZONA STATE UNIVERSITY

ELIZABETH MUTSCHLER
UNIVERSITY OF MARYLAND, BALTIMORE

GREGORY M. ST. L. O'BRIEN
UNIVERSITY OF WISCONSIN-MILWAUKEE

IRVING PILIAVIN
UNIVERSITY OF WISCONSIN-MADISON

WILLIAM REID
UNIVERSITY OF CHICAGO

MARTIN REIN
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

JACK ROTHMAN*
UNIVERSITY OF MICHIGAN

JOHN H. SCHUERMAN
UNIVERSITY OF CHICAGO

DEBORAH SHAPIRO
CHILD WELFARE LEAGUE OF AMERICA

RICHARD SIMPSON
UNIVERSITY OF NORTH CAROLINA

FRED MORRIS SOUTHERLAND
TULANE UNIVERSITY

SETH SPELLMAN*
STATE UNIVERSITY OF NEW YORK, ALBANY

NANCY STAVER
JUDGE BAKER GUIDANCE CENTER, BOSTON

LEONARD STERN
NATIONAL ASSOCIATION OF SOCIAL WORKERS

SANDRA TANENBAUM
PENNSYLVANIA DEPARTMENT OF PUBLIC WELFARE

TONY TRIPODI
UNIVERSITY OF MICHIGAN

JERRY TUREM
THE URBAN INSTITUTE, WASHINGTON, D.C.

FRANCIS J. TURNER*
WILFRID LAURIER UNIVERSITY

DIANA WALDFOGEL*
SIMMONS COLLEGE

JOAN WALLACE*
WESTERN MICHIGAN UNIVERSITY

ROBERT WEINBACH*
UNIVERSITY OF SOUTH CAROLINA

HAROLD WEISSMAN*
HUNTER COLLEGE OF THE CITY UNIVERSITY OF NEW YORK

WILLIAM BELL AND
IRV BERKOWITZ, RECORDERS
TULANE UNIVERSITY

AARON ROSENBLATT
ALLEN RUBIN
PROJECT DIRECTORS

---

*Member, Advisory Committee

**Chair, Advisory Committee

APPENDIX II

PROGRAM

Conference on Research Utilization

in Social Work Education

Hilton Hotel, New Orleans

October 5-7, 1977

Conference Schedule

WEDNESDAY MORNING: 9:00 A.M. Marlborough Suite, Second Floor

I. Registration of Participants

II. Introduction of Authors, Reactors, Group Leaders, Recorders, Students, Participants, CSWE staff — Dean Scott Briar, Advisory Committee Chairman

III. Welcome to New Orleans — Dean Fred Morris Southerland, Tulane University School of Social Work, and Millie M. Charles, Southern University in New Orleans Department of Social Welfare

IV. Introductory Remarks — Dr. Richard Lodge, CSWE

V. Significance of Project and Statement of Conference Goals and Structure — Dean Scott Briar

FIRST SESSION

Topic: Understanding the Utilization of Research in Social Work and Other Applied Professions

Author: Dr. Stuart Kirk, University of Wisconsin-Milwaukee School of Social Welfare

Reactor: Dr. Patricia Y. Martin, Florida State University School of Social Work

Author: Dr. Richard Simpson, University of North Carolina Department of Sociology

Reactor: Dr. Rekha Agarwala-Rogers, Stanford, California (remarks to be read)

WEDNESDAY AFTERNOON

SECOND SESSION

Topic: Identifying Research Priorities in Social Work Education

Author: Dr. Jerry Turem, The Urban Institute, Washington, D.C.

Reactor: Dean Shanti Khinduka, The George Warren Brown School of Social Work, Washington University

Author: Dr. David Austin, University of Texas at Austin School of Social Work

Reactor: Dr. Deborah Shapiro, Child Welfare League of America, New York

Topic: Improving the Quality and Increasing the Productivity of Research

Author: Dr. Jack Rothman, University of Michigan School of Social Work

Reactor: Miss Nancy Staver, Judge Baker Guidance Center, Boston

Author: Dr. Dorothy Miller, Institute for Scientific Analysis, San Francisco

Reactor: Dr. Gilbert Baca, New Mexico Highlands University Department of Behavioral Sciences

THURSDAY MORNING

THIRD SESSION

Topic: Incorporating Research into Social Work Education and Practice

A. Macro Level

Authors: Dr. Irwin Epstein and Dr. Toni Tripodi,

University of Michigan School of Social Work

Reactor: Andrew Fox, Vice-President, Social Service Delivery Systems

B. Micro Level

Author: Dean Scott Briar, University of Washington School of Social Work

Reactor: Professor Laura Epstein, University of Chicago School of Social Service Administration

Topic: Specifying Curriculum Goals for Research in Social Work Education

Author: Dr. John Schuerman, University of Chicago School of Social Service Administration

Reactor: Dr. Morton Arkava, University of Montana Department of Social Work

Author: Professor Anne L. Minahan, Director, University of Wisconsin-Madison School of Social Work

Reactor: Dr. Joan Wallace, Director, Western Michigan University School of Social Work

THURSDAY AFTERNOON

FOURTH SESSION

Topic: Strategies and Tactics for Increasing the Production and Utilization of Research in Social Work Education

Authors: Dean Gregory O'Brien and Dr. Jon Bushnell, University of Wisconsin-Milwaukee School of Social Welfare

Reactor: Dr. Carel Germain, Columbia University School of Social Work

Authors: Dr. Martin Rein, Massachusetts Institute of Technology, Cambridge, and Ms. Sandra Tanenbaum, Department of Public Welfare, Commonwealth of Pennsylvania

Reactor: Dr. Harold Weissman, Hunter College of the City University of New York School of Social Work

FORMATION OF DISCUSSION GROUPS

The participants will be asked to form four discussion groups. The group members will have available for their use a summary of remarks and proposals for action resulting from discussion at each of the sessions. The task of each group will be to prepare a final statement that will be read to the conference on Friday morning. The group members may wish to confine their statement to certain of the areas covered by the conference, or they may wish to make additional comments or establish priorities for future attention.

Group Leaders:

Dr. Kay L. Dea, University of Utah Graduate School of Social Work

Dean Seth Spellman, State University of New York at Albany School of Social Welfare

Dean Frank Turner, Wilfrid Laurier University Faculty School of Social Work

Dr. Robert Weinbach, University of South Carolina College of Social Work

Recorders: Mr. William J. Bell and Mr. Irv Berkowitz, Tulane University School of Social Work; and Dean Diana Waldfogel, Simmons College School of Social Work

FRIDAY MORNING

I. Presentation of Reports

II. Discussion of Reports

III. Recommendation for Future Action

IV. Evaluation of the Conference

Conference ends at 12:30 p.m. on Friday, October 7, 1977.